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EPA--560/5-82-004

DE83 006368

EPA 560/5-82-004
ORNL/EIS-196/V2

# CHEMICALS IDENTIFIED IN FERAL AND FOOD ANIMALS, A DATA BASE

Second Annual Report, October 1982
Volume II
Records 533-1515

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Information Center Complex
Information Division
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37830
operated by
UNION CARBIDE CORPORATION
for the
DEPARTMENT OF ENERGY
Contract No. W-7405-eng-26

This effort was accomplished under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis, National Cancer Institute, National Institutes of Health, Chairperson, Dr. Herman F. Kraybill.

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Date Published — December 1982

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ACKNOWLEDGMENTS

We gratefully acknowledge the assistance of Janis Pruett and the staff of the Toxicology Information Response Center in the collection of source documents for the data base. Janet Scott, of the Computer Services Group, was responsible for the computer production of the document. John Getsi, of the Publications Office, was responsible for coordinating the final editing and printing of the document. These groups are part of the Information Center Complex, Information Division, Oak Ridge National Laboratory.

For his support and valuable advice, the U.S. Environmental Protection Agency project officer expresses special thanks to Dr. Herman F. Kraybill, the National Cancer Institute coproject officer and the chairperson of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC). In addition, thanks are due the members of the ICGEC Task Group on Chemicals in Human Tissues.

# INTRODUCTION

A comprehensive data base of chemicals identified in feral and food animals has been established under the direction of the Exposure Evaluation Division in the U.S. Environmental Protection Agency's Office of Toxic Substances. This effort has grown out of the concern over continuing reports of toxic chemicals in human tissues and body fluids. Feral populations and food animals are regarded as indicators of environmental contamination and subsequent human body burden.

This data file is a companion to *Chemicals Identified in Human Biological Media, A Data Base*, and follows basically the same format. The data base on human body burden is in its fourth year of publication. This is the second annual report for the feral and food animal file.

Data were obtained primarily from the open literature through manual searches (retrospective to 1979) of the journals listed in Appendix A. The data base contains information on 134 different substances. Appendix B lists, by CAS registry numbers and preferred names, the chemicals in Volume II. For the user's convenience, cross-referenced chemical lists of CAS preferred and common names are provided in Appendix C. The animals, tissues, and body fluids found to be contaminated by these chemicals are listed in Appendix D.

The data base is published annually in tabular format with indices and chemical listings that allow specific searching. A limited number of custom computer searches of the data base are available in special cases when the published format does not allow for retrieval of needed information.

It should be emphasized that the purpose of the data base is to provide a centralized resource of animal residue data and in no way is intended to obviate the need for the user to ultimately refer to the original literature or data source. It is not the intent of this program to conduct any screening or evaluation of the data.

This data base was established under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC), National Cancer Institute. Funding is through the National Cancer Institute-Environmental Protection Agency Collaborative Program. The work is

being done by the Oak Ridge National Laboratory's Chemical Effects Information Center, Information Center Complex, through interagency agreements involving the National Cancer Institute, the Environmental Protection Agency, and the Department of Energy. Members of the ICGEC Task Group on Chemicals in Human Tissues provide support to the program's activities. Agencies represented by members of the task group include the Armed Forces Institute of Pathology, the Centers for Disease Control, the Department of Agriculture, the Department of Energy, the Environmental Protection Agency, the Food and Drug Administration, the National Bureau of Standards, the National Cancer Institute, the National Center for Toxicological Research, the National Institute for Environmental Health Sciences, the National Institute for Occupational Safety and Health, and the National Library of Medicine.

Comments by the users of this document are invited. Questions, comments, and requests for additional information about the data base and/or searches thereof should be directed to:

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# USERS' GUIDE

The data base is published annually. The document contains introductory materials, references, appendices, indices, and a chemical directory and animal residue data extracted from the source documents. Data from 165 of the over 430 documents collected to date have been entered in the data base as of October 1982.

When appropriate articles are identified, data are extracted and entered in the data base by chemical, animal, and tissue/body fluid. Each data entry comprises a single record (or line entry) and is assigned a record number. If a particular document deals with more than one animal and/or chemical and/or tissue, there will be multiple records for that document. For example, a study of 5 chemicals in each of 3 tissues in 2 animals has 30 different records (or 30 line entries) in the data base with 30 record numbers. Record numbers are assigned consecutively throughout the entire data base and appear in the upper left corner in the first column for each record.

The data base is in tabular format and arranged alphabetically by CAS preferred chemical name. The sample record below illustrates the format. The chemical, in this case copper, is given along with its CAS registry number, formula, atomic weight, melting point, boiling point, and vapor pressure. The common name of the animal is listed alphabetically below the chemical data, followed by taxonomic names when available.

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Mule deer
ODOCOILEUS HEMIONUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 154<br>Liver | | AAS | a) 12<br>b) 6 | a) 19-114 ppm<br>b) 45-227 ppm<br>Dry wt | a) 61.4±34.0 ppm<br>b) 97.3±59.6 ppm<br>Dry wt | a) Adults, 1.5 yr & older<br>b) Fawns, 0.5 yr<br>Captured 1/79 near oil shale tracts before mining initiated.<br>Colorado, Rico Blanco County, Piceance Creek Basin<br>DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER | Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182 |

Tissues are listed alphabetically in the first column with the record number. In the sample record, the tissue is liver and the record number is 154.

Information in the next five columns — exposure route, analytical method, number of cases, range, and mean — is self-explanatory and is provided when available in the source document. A list of abbreviations used for analytical method is provided on page 7. Exponential values are written as in the following example: $5 \times 10^{-15}$ is 5 × 10(E-15). All means are arithmetic unless designated geometric. When included, standard error is indicated by S.E. However, values for standard deviations, when given, have no such designations. When only graphically displayed data were available, values have been estimated by the extractor and so indicated in the table under GENERAL INFORMATION.

In the GENERAL INFORMATION column, a variety of information may be included that is pertinent to the range and mean as well as experimental design, geography, health effects, pathology, morphology, and toxicity. In general, supporting information deemed important for understanding the data presented appears in this column.

The REFERENCE column includes author(s), publication date, and source. Complete literature citations are listed alphabetically by author in References for Data Base, page 9.

Because not all details of the research can be included in this publication, keywords, in uppercase, are provided for further insight into important aspects of the source documents. The use of a different chemical as a keyword indicates studies on that chemical were also reported in the same document. For example, CADMIUM may appear as a keyword in a record on mercury when the work includes data on both chemicals. In the same way, a different tissue occurring as a keyword indicates the document also deals with that tissue.

CAS preferred names are from the *Ninth Collective Index*, and, when different, names from both eighth and ninth indices (8 CI, 9 CI) are given. Appendix C provides cross-referenced alphabetical lists of commonly used synonyms paired with the CAS preferred names.

For accessing information in the data base when only the CAS registry number is known, the user should refer to Appendix B, which lists CAS registry numbers coupled with the preferred names. For help in locating chemicals in the tabular portion of the documents, an alphabetically arranged directory of chemicals by CAS names and record numbers is provided just before the Data Base. The second part of the directory lists formulas alphabetically along with the corresponding CAS preferred names and record numbers. Indices by author, corporate author, animals and tissues, tissue or body fluid, geography, and keywords refer the user to the appropriate record number.

## ABBREVIATIONS FOR ANALYTICAL METHODS

| | |
|---|---|
| AAS | Atomic absorption spectrometry |
| APDC-MIBK | Ammonium pyrrolidine diethiocarbamate-methylisoburyl ketone extraction |
| ASV | Anodic stripping voltammetry |
| CC | Column chromatography |
| Chem | Chemical methods |
| Electrochem | Electrochemical methods |
| ELISA | Enzyme-linked immunosorbent assay |
| EM | Electron microscopy |
| ES | Emission spectrometry |
| GC | Gas chromatography |
| GC-EC | Gas chromatography; electron-capture detection |
| GC/MF | Gas chromatography coupled with mass fragmentography |
| GC/MS | Gas chromatography coupled with mass spectrometry |
| Histochem | Histochemistry |
| HPLC | High-pressure liquid chromatography |
| IR | Infrared analysis |
| ISE | Ion-specific electrode |
| LSV | Linear sweep voltammetry |
| MAS | Molecular absorption spectrophotometry |
| MED | Microwave emission detector (ion) |
| MS | Mass spectrometry |
| NA | Neutron activation |
| NMR | Nuclear magnetic resonance |
| PIXE | Proton induced X-ray emission |
| RIA | Radioimmunoassay |
| TLC | Thin-layer chromatography |
| UV | Ultraviolet analysis |
| X-ray fluores | X-ray fluorescence |
| X-ray spectrom | X-ray spectrometry |

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## REFERENCES FOR PHYSICAL AND CHEMICAL DATA

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# APPENDIX A

## Journals Searched

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*Advances in Veterinary Science and Comparative Medicine*
*Agricultural and Food Chemistry, Journal of*
*Ambio*
*American Journal of Physiology*
*American Journal of Veterinary Research*
*American Veterinary Medical Association, Journal of the*
*Animal Ecology, Journal of*
*Animal Science, Journal of*
*Aquaculture*
*Archives of Environmental Contamination and Toxicology*
*Archives of Environmental Health*
*Archives of Toxicology*
*Australian Veterinary Journal*
*Avian Diseases*
*Bovine Practice*
*British Veterinary Journal*
*Bulletin of Environmental Contamination and Toxicology*
*Canadian Journal of Animal Science*
*Canadian Veterinary Journal*
*Chemosphere*
*Comparative Pathology, Journal of*
*Cornell Veterinarian*
*Ecotoxicology and Environmental Safety*
*Environmental Health Perspectives*
*Environmental Pollution, Series A (Ecological & Biological)*
*Environmental Research*
*Environmental Science and Health, Journal of*
*Environmental Science and Technology*
*Fish Diseases, Journal of*
*Food and Cosmetics Toxicology*
*International Journal of Environmental Studies*
*Nature*
*Nutrition, Journal of*

*Pesticides Monitoring Journal*
*Residue Reviews*
*Science*
*Science of Food and Agriculture, Journal of*
*Science of the Total Environment*
*Toxicology and Applied Pharmacology*
*Toxicology and Environmental Health, Journal of*
*Tropical Animal Health and Production*
*Veterinary Clinical Pathology*
*Wildlife Diseases, Journal of*
*Wildlife Society Bulletin*
*Xenobiotica*

# APPENDIX B

## Chemicals in Data Base (1981-1982)
## by CAS Registry Numbers and Preferred Names

Polybrominated biphenyls (No postings in CHEMLINE).

Polychlorinated dibenzofurans (No postings in CHEMLINE).

Polychlorinated naphthalenes (No postings in CHEMLINE).

50-29-3 DDT, total (No postings in CHEMLINE).

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

50-32-8 Benzo(a)pyrene

53-19-0 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

55-38-9 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

56-54-2 Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

56-55-3 Benz(a)anthracene

57-68-1 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

58-89-9 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

59-51-8 Methionine, DL- (8 CI); DL-Methionine (9 CI)

60-57-1 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

67-66-3 Chloroform (8 CI); Methane, trichloro- (9 CI)

70-30-4 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

72-20-8 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

72-54-8 Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

72-55-9 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

76-44-8 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

77-73-6 4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

84-74-2 Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

87-86-5 Phenol, pentachloro-

91-20-3 Naphthalene

93-76-5 Acetic acid, (2,4,5-trichlorophenoxy)-

| | |
|---|---|
| 117-81-7 | Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI) |
| 118-74-1 | Benzene, hexachloro- |
| 122-14-5 | Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI) |
| 129-00-0 | Pyrene |
| 131-11-3 | Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI) |
| 143-50-0 | 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- |
| 302-04-5 | Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI) |
| 319-84-6 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI) |
| 319-85-7 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI) |
| 319-86-8 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI) |
| 330-54-1 | Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI) |
| 504-24-5 | Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI) |
| 789-02-6 | Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI) |
| 1024-57-3 | 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) |
| 1162-65-8 | Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI) |
| 1165-39-5 | 1H,12H-Furo(3',2':4,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,12a-tetrahydro-5-methoxy-, (7aR-cis)- |
| 1331-47-1 | Benzidine, dichloro- (8 CI); (1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI) |
| 1336-36-3 | Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI) |
| 1403-66-3 | Gentamicin |
| 1445-75-6 | Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9 CI) |
| 1746-01-6 | Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI) |
| 1795-17-1 | Dodecane, 1-cyclohexyl- (8 CI); Cyclohexane, dodecyl- (9 CI) |
| 2385-85-5 | 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- |
| 3268-87-9 | Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI) |
| 5103-71-9 | 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) |

| | |
|---|---|
| 5103-73-1 | 4,7-Methanoindan,<br>1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI);<br>4,7-Methano-1H-indene,<br>1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha-<br>(9 CI) |
| 5103-74-2 | 4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8<br>CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,<br>(1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI) |
| 6795-23-9 | Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione,<br>2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)- |
| 7377-03-9 | Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI) |
| 7439-89-6 | Iron |
| 7439-92-1 | Lead |
| 7439-96-5 | Manganese |
| 7439-97-6 | Mercury |
| 7439-98-7 | Molybdenum |
| 7440-02-0 | Nickel |
| 7440-21-3 | Silicon |
| 7440-22-4 | Silver |
| 7440-28-0 | Thallium |
| 7440-31-5 | Tin |
| 7440-36-0 | Antimony |
| 7440-38-2 | Arsenic |
| 7440-41-7 | Beryllium |
| 7440-42-8 | Boron |
| 7440-43-9 | Cadmium |
| 7440-47-3 | Chromium |
| 7440-48-4 | Cobalt |
| 7440-50-8 | Copper |
| 7440-55-3 | Gallium |
| 7440-61-1 | Uranium |
| 7440-62-2 | Vanadium |
| 7440-66-6 | Zinc |
| 7553-56-2 | Iodine |
| 7782-41-4 | Fluorine |

7782-49-2 Selenium

8001-35-2 Toxaphene

8001-58-9 Creosote

10045-97-3 Cesium, isotope of mass 137

11096-82-5 Arochlor 1260

11097-69-1 Arochlor 1254

12674-11-2 Arochlor 1016

12676-14-1 Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

12789-03-6 Chlordane

13494-80-9 Tellurium

13981-52-7 Polonium, isotope of mass 210

13982-63-3 Radium, isotope of mass 226

14255-04-0 Lead, isotope of mass 210

14269-63-7 Thorium, isotope of mass 230

22967-92-6 Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

24880-48-8 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

27577-90-8 Pyrene, methyl-

34465-46-8 Dibenzo(b,e)(1,4)dioxin, hexachloro-

37871-00-4 Dibenzo(b,e)(1,4)dioxin, heptachloro-

39765-80-5 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

39801-14-4 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-

53469-21-9 Arochlor 1242 (No postings in CHEMLINE).

# APPENDIX C

## Cross-Referenced Chemical Lists

CAS Preferred Names – Common Names, page 35
Common Names – CAS Preferred Names, page 41

Antimony

Antimony; C.I. 77050; Regulus of antimony; Stibium

Arochlor 1242 (No postings in CHEMLINE).

Arcochlor 1242

Arcochlor 1254

Arochlor 1254; PCB 1254

Arcochlor 1260

Arochlor 1260; PCB 1260

Arsenic

Arsenic; Arsenic-75; Arsenic black; Grey arsenic; Metallic arsenic

Benzene, hexachloro-

Aatin; Anticarie; Bunt-cure; Bunt-no-more; Co-op Hexa; HCB; Hexachlorobenzene; Julin's carbon chloride; No Bunt; No Bunt Liquid; No Bunt 40; No Bunt 80; Pentachlorophenyl chloride; Perchlorobenzene; Sanocile; Smicciotox

Benzidine, dichloro- (8 CI); (1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI)

Dichlorobenzidine

Benzo(a)pyrene

Benz(a)pyrene; Benzo(d,e,f)chrysene; BP; 3,4-Benz(a)pyrene; 3,4-Benzopyrene; 3,4-Benzopyrene [carcinogen]

Beryllium

Beryllium; Beryllium-9; Glucinium

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

PCB; Biphenyl, chlorinated; Chlorinated diphenyl

Boron

Boron

Cadmium

Cadmium; C.I. 77180

Chlordane

Belt; CD-68; Chlordan; Chlordane; Chlordane (Technical); Chlor Kil; Corodane; Intox; Intox [insecticide]; Kypchlor; Octa-Klor; Technical Chlordane; Toxichlor; Unexas-Kceder; Velsicol 1068; 1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene; 1,2,4,5,6,7,8,8-Octachloro-3a,4,7,7a-tetrahydro-4,7-methanoindan; 1,2,4,5,6,7,8,8-Octachloro-4,7-methano-3a,4,7,7a-tetrahydroindane

Chloroform (8 CI); Methane, trichloro- (9 CI)

Trichloroform; Trichloromethane; R 20 [refrigerant]; R 20

Chromium

Chromium

Cobalt

C.I. 77320; Cobalt; Cobalt-59

Copper

Allbri Natural Copper; Anac 110; Arwood copper; CDA 101; CDA 102; CDA 110; CDA 122; C.I. Pigment Metal 2; C.I. 77400; CuEP; CuEPP; Cu M3; Copper; Copper M 1; Copper powder; ECuP1; E-Cu57; Kafar copper; M1 [copper]; M2 [copper]; M3 [copper]; M4 [copper]; M31; M3S; M 1; M 3; M 4; OFHC Cu; Raney copper; 1721 Gold

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC; alpha-Benzene hexachloride; alpha-HCH; alpha-Hexachloran; alpha-Hexachlorane; alpha-Hexachlorcyclohexane; alpha-Hexachlorocyclohexane; alpha-Lindane; alpha-1,2,3,4,5,6-Hexachlorcyclohexane; alpha-1,2,3,4,5,6-Hexachlorocyclohexane

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-BHC; beta-Benzene hexachloride; beta-HCH; beta-Hexachlorobenzene; beta-Hexachlorocyclohexane; beta-Lindane; beta-1,2,3,4,5,6-Hexachlorocyclohexane

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-(aeeee)-1,2,3,4,5,6-Hexachlorocyclohexane; delta-BHC; delta-Benzene hexachloride; delta-HCH; delta-Hexachlorocyclohexane; delta-Lindane; delta-1,2,3,4,5,6-Hexachlorocyclohexane

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aalindan; Aficide; Agrocide; Agrocide III; Agrocide WP; Ameisentod; Ameisenmittel merk; Aparasin; Aphtiria; Aplidal; Arbitex; BBH; Ben-Hex; Bentox 10; Bexol; BHC; Celanex; Chloresene; Codechine; DBH; Detmol-Extrakt; Devcran; Dol Granule; Drilltox-Spezial Aglukon; Entomoxan; ENT 7,796; Forst-Nexen; Gamma benzene hexachloride; gamma-Benzene hexachloride; gamma-BHC; gamma-HCH; gamma-Hexachloran; gamma-Hexachlorane; gamma-Hexachlorobenzene; gamma-Hexachlorocyclohexane; gamma-Lindane; Gammater; gamma-1,2,3,4,5,6-Hexachlorocyclohexane; Gexane; HCC; HCCH; HCH; Heclotox; Hexa; Hexachloran; Hexachlorane; Hexaverm; Hexicide; Hexycian; HGI; Hortex; Hungaria L 7; Jacutin; Kokotine; Kwell; Lendine; Lentox; Lidenal; Lindane; Lindatox; Lindex; Lindosep; Listox; Linvur; Lorexane; Millol 49; Mszycol ; Neo-Scabicidol; Nexen FF; Nexit; Nexit-stark; Nexol-E; Nicochloran; Omnitox; Ovadziak; Owadziak; Pedraczak; Pflanzol; Quellada; Sang-gamma; Spritz-Rapidin; Spruehpflanzol; Streunex; Tap 85; Tri-6; Viton; 1,2,3,4,5,6-Hexachlorocyclohexane; 666

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-

Aflatoxin M1

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)

Aflatoxin B1

DDT, total (No postings in CHEMLINE).

DDT, total

Dibenzo(b,e)(1,4)dioxin, heptachloro-

Heptachlorodibenzo-p-dioxin

Dibenzo(b,e)(1,4)dioxin, hexachloro-

HCDD; Hexachlorodibenzo-p-dioxin

Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

OCDD; Octachlorodibenzodioxin; Octachlorodibenzo(b,e)(1,4)dioxin; Octachlorodibenzo-p-dioxin; 1,2,3,4,6,7,8,9-Octachlorodibenzodioxin; 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

Dioxin; TCDBD; TCDD; 2,3,7,8-TCDD; 2,3,6,7-Tetrachlorodibenzo-p-dioxin; 2,3,7,8-Tetrachlorodibenzo-(b,e)(1,4)dioxan; 2,3,7,8-Tetrachlorodibenzo-p-dioxin; 2,3,7,8-Tetrachlorodibenzo-1,4-dioxin

Dodecane, 1-cyclohexyl- (8 CI); Cyclohexane, dodecyl- (9 CI)

Dodecylcyclohexane

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDD; Dichlorodiphenyl dichloroethane; Dilene; Rcl700; p,p'-DDD; p,p'-Dichlorodiphenyldichloroethane; p,p'-Dichlorodiphenyl-2,2-dichloroethylene; p,p'-TDE; Rhothane; TDE; Tetrachlorodiphenyl ethane; 1,1-Bis(p-chlorophenyl)-2,2-dichloroethane; 1,1-Bis(4-chlorophenyl)-2,2-dichloroethane; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane; 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethane; 4,4'-DDD

Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-[2,2,2-trichloro-1-(4-chlorophenyl)ethyl]- (9 CI)

o,p'-DDT; 2,4'-DDT; 2-(2-chlorphenyl)-2-(4-chlorophenyl)-1,1,1-trichloroethane

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Aavero-extra; Agritan; alpha,alpha-Bis(p-chlorophenyl)-beta,beta,beta-trichlorethane; Arkotine; Azotox M-33; Bosan supra; Bovidermol; Chlorophenothane; Chlorphenothan; Chlorphenotoxum; Ci'ox; Clofenotan; Clofenotane ; DDT; Deoval; Detox; Detoxan; Dodat; Dibovir; Dichlorodiphenyltrichloroethane; Dicophane; Dykol; ENT-1506; Estonate; Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl); Gesalid; Gesarol; Ivoran; Kutoxan; Neocid; Neocidol; Parachlorocidum; PBB1; Pentachlorin; Penticidum; p,p'-DDT; p,p'-Dichlorodiphenyltrichloroethane; Tafidex; Trichlorobis(4'-chlorophenyl)ethane; Zerdane; 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane; 1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; 1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane; 2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane; 4,4'-Dichlorodiphenyltrichloroethane

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDE; p,p'-DDE; p,p'-Dichlorodiphenyldichloroethylene; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene; 1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene; 4,4'-DDE

Gallium

Gallium

Gentamicin

Gentamicin; Gentamycin

Iron

Armco iron; Ferrovac E; Iron; Icha; E05A; PZh2M; PZh2M2; PZh3; PZh1M1; PZh3M; PZh4M; PZh-2; PZh2M1; PZh-1M3; SOY E-2

Lead

C.I. Pigment Metal 4; C.I. 77575; KS-4; Lead; Lead Flake; Lead S2; S0; S1

Manganese

Collcidal manganese; Cutaval; Manganese

Mercury

Mercury; Quicksilver

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury; Methylmercury(1+); Methylmercury(II) cation; Methyl mercury ion; Methylmercury ion(1+)

Methionine, DL- (8 CI); NL-Methionine (9 CI)

Acimetion; alpha-Amino-gamma-methylmercaptobutyric acid; DL-2-Amino-4-(methylthio)butyric acid; Banthionine; Cymarop; Dyprin; Lobasine; Meonine; Mertionin; Methilasin; (+-)-Methionine; Metione; Neston; Racemethionine

Naphthalene

Albocarbon; Dezodorator; Moth flakes; Naphthaline; Naphthene; Tar camphor; White tar

Nickel

C.I. 77775; Nickel; Ni 270; Ni 4303T; Ni 0901-S (Harshaw); Nickel NP2; Nickel 270; NP2; Raney alloy; Raney nickel; RCH 55/5

Phenol, pentachloro-

Dowicide 7; EP 30; Fungifen; Grundier Arbezol; Lauxtol; Liroprem; PCP; Penchlorol; Penta; Pentachlorophenol; Permasan; Santophen 20

Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9 CI)

Diisopropyl methanephosphonate; Diisopropyl methylphosphonate; DIMP

Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Amidofos; Amidophos; Crufomat; Crufomate; Dowco 132; Montrel; Ruelene; Ruelene drench; 4-tert-Butyl-2-chlorophenyl methyl methylphosphoramidate

Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Accothion; Agria 1050; Agriya 1050; Agrothion; Akotion; Arbogal; BAY 41831; Bayer 41831; Bayer S 5660; CL 47300; CP 47114; Dimethyl 4-nitro-m-tolyl phosphorothionate; EI 47300; ENT 25,715; Fenithion; Fenitrothion; Folithion; MEP [pesticide]; MEP; Metathoin; Metathione; Metathion E 50; Metathionine E50; Metation; Metation E50; Methylnitrophos; Oglawik F; Monsanto CP 47114; Nitrophos; Nuvanol; Oleosumifene; OMS 43; Ovadofos; Ovadofos; Phenitrothion; S 112A; S 5660; Sumithion; Verthion; 009; 8057HC

Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Bisoflex DOP; Bisoflex 81; Bis(2-ethylhexyl)phthalate; Bis(2-ethylhexyl) 1,2-benzenedicarboxylate; Compound 889; DEHP; Di(Ethylhexyl)phthalate; Dioctyl phthalate; Di-(2-Ethylhexyl)-phthalate; DOP; Ethylhexyl phthalate; Eviplast 80; Eviplast 81; Fleximel; Flexol DOP; Kodaflex DOP; Octoil; Octylphthalate; Palatinol AH; Phthalic acid dioctyl ester; Pittsburgh PX-138; Sicol 150; Staflex DOP; Truflex DOP; Vestinol AH; Vinicizer 80; Witcizer; 1,2-Benzenedicarboxylic acid, bis(ethylhexyl)ester; 2-Ethylhexyl phthalate

Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Butyl phthalate; Celluflex DPT; DBP; Dibutyl phthalate; Di-n-butyl phthalate; Elaol; Genoplast B; Hexaplas M/B; n-Butyl phthalate; Palatinol C; Polycizer DBP; PX 104; Staflex DBP; Unimoll BB; Witcizer 300

Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Avolin; Dimethyl 1,2-benzenedicarboxylate; Dimethyl phthalate; DMP [insect repellent]; DMP; Fermine; Mipax; NTM; Palatinol M; Repeftal; Solvanol; Solvarone; Unimoll DM

Polybrominated biphenyls (No postings in CHEMLINE).

PBB; Polybrominated biphenyls

Polychlorinated dibenzofurans (No postings in CHEMLINE).

Polychlorinated dibenzofurans

Polychlorinated naphthalenes (No postings in CHEMLINE).

Polychlorinated naphthalenes; PCN

Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

gamma-Aminopyridine; p-Aminopyridine; Phillips 1861; WAI 10-3; 4-Aminopyridine; 4-Pyridylamine

Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

alpha-(6-methoxy-4-quinolyl-5-vinyl-2-quinuclidinemethanol; beta-Quinine; Chinidin; Conchinin; Conquinine; Pitayine; (+)-Quinidine; 6-Methoxy-alpha-(5-vinyl-2-quinuclidinyl)-4-quinolinemethanol

Selenium

C.I. 77805; Selenium

Silicon

Silicon

Silver

Argentum; C.I. 77820; L 3; Shell Silver; Silflake 135; Silver; Silver atom; Silver metal; Sr 999; V 9

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

A-502; Azolmetazin; Cremomethazine; Diazil [the sulfanilamide]; Diazil; Diazyl; Dimezathine; Kelametazine; Mefanal; Mermeth; Measina; Meazina; N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide; N(1)-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide; N-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide; Paramez; Pirmazin; Spanbolet; Sulfadimerazine; Sulfadimesin; Sulfadimesine; Sulfadimethyldiazine; Sulfadimethylpyrimidine; Sulfadimezin; Sulfadimezine; Sulfadimidin; Sulfadimidine; Sulfadine; Sulfamethazine; Sulfamethiazine; Sulfamezathine; Sulfix; Sulfodimesin; Sulfodimezine; Sulmet; S-Mez; Sulphadimethylpyrimidine; Sulphadimidine; Sulphamethasine; Sulphamethazine; Sulphamezathine; Sulphamidine; Sulphodimezine; Superseptil; Superseptyl; Vertolan; Vertolin; 2-(p-Aminobenzenesulfonamido)-4,6-dimethylpyrimidine; 2-Sulfanilamido-4,6-dimethylpyrimidine; 4,6-Dimethyl-2-sulfanilamidopyrimidine

Tellurium

Tellurium

Thallium

Thallium; Ramor

Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Isothiocyanate; Isothiocyanic acid, ion (1-); Thiocyanate anion; Thiocyanate; Thiocyanate (1-); Thiocyanate ion; Thiocyanate ion (1-); Thiocyanide; Rhodanide

Tin

C.I. Pigment Metal 5; C.I. 77860; Metallic tin; Silver Matt Powder; Tin; Tin Flake; Tin Powder; Wang

Toxaphene

Alltox; Anatox; Camphechlor; Camphochlor; Chlorinated camphene; Estonox; Geniphene; Hercules 3956; Kamfochlor; Melipax; M 5055; PChK; Penphene; Phenacide; Phenatox; Polychlorocamphene; Strobane T; Synthetic 3956; Toxakil; Toxaphen; Toxyphen

Vanadium

Vanadium; Vanadium-51

Zinc

Blue powder; Zinc

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-

Photosirex; 8-Hydrosirex; 8-Monohydrosirex

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

CG-1283; Dechlorane; Dechlorane Plus; Dechlorane Plus 515; Dechlorane 4070; Dechlorane 515; Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene; ENT 25,719; GC 1283; Hexachlorocyclopentadiene dimer; Mirex; Perchlorodihomocubane; Perchloropentacyclodecane; Perchloropentacyclo(5.2.1.0(2,6).0(3,9).0(5,8))decane; 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Aldrin Epoxide; Alvit 55; Compound 497; Dieldrin; Dieldrex; Dielmoth; Dieldrin; Dorytox; ENT-16225; HEOD; Illoxol; Insectlack; Kosbi-Albertan; Moth Snub D; Octalox; Red Shield; SD 3417; Termitox

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Compd. 269; Endrex; Endricol; Endrin; Experimental Insecticide 269; Hexadrin; Mendrin; Oktanex; SD 3419

1E,12H-Furo(3',2':4,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aR-cis)-

Aflatoxin G1

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

trans-Nonachlor

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Octachlor epoxide; Oxychlordan; Oxychlordane

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,584; Epoxyheptachlor; HCE; Heptachlor epoxide; Velsicol 53-CS-17

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

cis-Nonachlor; Nonachlor, cis

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-Chlordan; alpha-Chlordane; Chlordan, cis-; cis-Chlordan; cis-Chlordane

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

beta-Chlordan; beta-Chlordane; Chlordan, trans-; trans-Chlordan; trans-Chlordane

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Aahepta; Agroceres; E 3314; ENT 15,152; GPKh; Hepta; Heptachlor; Heptachlorane; Rhodiachlor; Velsicol 104; 3-Chlorochlordene

4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

Bicyclopentadiene; Biscyclopentadiene; Cyclopentadiene dimer; Dicyclopentadiene; 3a,4,7,7a-Tetrahydro-4,7-methanoindene

(+)-Quinidine
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

(+-)-Methionine
Methionine, DL- (8 CI); DL-Methionine (9 CI)

A-502
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Aahepta
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Aalindan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aavero-extra
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Accothion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Acimetion
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Aficide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aflatoxin B1
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)

Aflatoxin G1
1H,12H-Furo(3',2':4,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aR-cis)-

Aflatoxin M1
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-

Agria 1050
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Agritan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Agriya 1050
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Agroceres
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Agrocide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide III
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide WP
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrothion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Akotion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Albocarbon
Naphthalene

Aldrin Epoxide
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Allbri Natural Copper
Copper

Alltox
Toxaphene

alpha-(6-methoxy-4-quinolyl-5-vinyl-2-quinuclidinemethanol
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

alpha-Amino-gamma-methylmercaptobutyric acid
Methionine, DL- (8 CI); DL-Methionine (9 CI)

alpha-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Chlordan
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-Chlordane
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorcyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlorcyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha,alpha-Bis(p-chlorophenyl)-beta,beta,beta-trichlorethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Alvit 55
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Amatin
Benzene, hexachloro-

Aseisenmittel merk
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aseisentod
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Azidofos
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Azidophos
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Anac 110
Copper

Anatox
Toxaphene

Anticarie
Benzene, hexachloro-

Antimony
Antimony

Aparasin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aphtiria
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aplidal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Arbitex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Arbogal
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Argentum
Silver

Arkotine
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Araco iron
Iron

Arochlor 1242
Arochlor 1242 (No postings in CHEMLINE).

Arochlor 1254
Arochlor 1254

Arochlor 1260
Arochlor 1260

Arsenic
Arsenic

Arsenic black
Arsenic

Arsenic-75
Arsenic

Arwood copper
Copper

Avolin
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Azolmetazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Azotox M-33
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Banthionine
Methionine, DL- (8 CI); DL-Methionine (9 CI)

BAY 41831
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Bayer S 5660
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Bayer 41831
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

BBH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Belt
Chlordane

Ben-Hex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bentox 10
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Benz(a)pyrene
Benzo(a)pyrene

Benzo(d,e,f)chrysene
Benzo(a)pyrene

Beryllium
Beryllium

Beryllium-9
Beryllium

beta-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-Chlordan
4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

beta-Chlordane
4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

beta-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-Hexachlorobenzene
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

beta-Quinine
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

beta-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

Bexol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bicyclopentadiene
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

Biphenyl, chlorinated
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Bis(2-ethylhexyl)phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Bis(2-ethylhexyl)1,2-benzenedicarboxylate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Biscyclopentadiene
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

Pisoflex DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Pisoflex 81
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Blue powder
Zinc

Boron
Boron

Bosan supra
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Povidermol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

BP
Benzo(a)pyrene

Bunt-cure
Benzene, hexachloro-

Bunt-no-more
Benzene, hexachloro-

Butyl phthalate
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

C.I. Pigment Metal 2
Copper

C.I. Pigment Metal 4
Lead

C.I. Pigment Metal 5
Tin

C.I. 77050
Antimony

C.I. 77180
Cadmium

C.I. 77320
Cobalt

C.I. 77400
Copper

C.I. 77575
Lead

C.I. 77775
Nickel

C.I. 77805
Selenium

C.I. 77820
Silver

C.I. 77860
Tin

Cadmium
Cadmium

Camphechlor
Toxaphene

Camphochlor
Toxaphene

CD-68
Chlordane

CDA 101
Copper

CDA 102
Copper

CDA 110
Copper

CDA 122
Copper

Celanex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Cellufler DPB
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

CG-1283
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Chiniiin
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

Chlor Kil
Chlordane

Chlordan
Chlordane

Chlordan, cis-
4,7-Methanoindan, 1alpha,2alpha,3beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

Chlordan, trans-
4,7-Methanoindan, 1beta,2alpha,3alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

Chlordane
Chlordane

Chlordane (Technical)
Chlordane

Chloresene
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Chlorinated camphene
Toxaphene

Chlorinated diphenyl
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Chlorophenothane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorphenothan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorphenotoxum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chromium
Chromium

cis-Chlordan
4,7-Methanoindan, 1alpha,2alpha,3beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

cis-Chlordane
4,7-Methanoindan, 1alpha,2alpha,3beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

cis-Nonachlor
4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

Citox
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

CL 47300
Phosphorothioic acid, O,O-diethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-diethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Clofenotan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clofenotane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Co-op Hexa
Benzene, hexachloro-

Cobalt
Cobalt

Cobalt-59
Cobalt

Codechine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Colloidal manganese
Manganese

Compd. 269
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Compound 497
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Compound 889
Phthalic acid, bis(2-ethylheryl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Conchinin
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

Corquinine
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

Copper
Copper

Copper M 1
Copper

Copper powder
Copper

Corodane
Chlordane

CP 47114
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Cremomethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Crufomat
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Crufomate
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Cu M3
Copper

CuEP
Copper

CuEPP
Copper

Cutaval
Manganese

Cyclopentadiene dimer
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

Cynaron
Methionine, DL- (8 CI); DL-Methionine (9 CI)

DEH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

DBP
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

DCuP1
Copper

DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDT
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

DDT, total
DDT, total (No postings in CHEMLINE).

Dechlorane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus 515
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane 4070
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane 515
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

DEHP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

delta-(aeeee)-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

delta-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

Decval
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Detmol-Extrakt
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Detox
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Detoxan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Devoran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Dezodorator
Naphthalene

Di(Ethylhexyl)phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Di-(2-Ethylhexyl)-phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Di-n-butyl phthalate
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Diazil
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Diazil (the sulfanilamide)
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Diazyl
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Dilovin
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dibutyl phthalate
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Dichlorobenzidine
Benzidine, dichloro- (8 CI); (1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI)

Dichlorodiphenyl dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-
(9 CI)

Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dicophane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dicyclopentadiene
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

Dieldrex
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dieldrin
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dieloth
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Diisopropyl methanephosphonate
Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9
CI)

Diisopropyl methylphosphonate
Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9
CI)

Dilene
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-
(9 CI)

Dimethyl phthalate
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Dimethyl 1,2-benzenedicarboxylate
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Dimethyl 4-nitro-m-tolyl phosphorothionate
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl
O-(3-methyl-4-nitrophenyl) ester (9 CI)

Dimezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

DIMP
Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9
CI)

Dioctyl phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

DI-2-Amino-4-(methylthio)butyric acid
Methionine, DL- (8 CI); DL-Methionine (9 CI)

DMF (insect repellent)
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

DMP
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Dodat
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dodecachlorocctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dodecylcyclohexane
Dodecane, 1-cyclohexyl- (8 CI); Cyclohexane, dodecyl- (9 CI)

Dol Granule
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Dorytox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dowco 132
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid,
methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Dowicide 7
Phenol, pentachloro-

Drilltox-Spezial Aglukon
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Dykol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dyrrin
Methionine, DL- (8 CI); DL-Methionine (9 CI)

E 3314
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

E-Cu57
Copper

EI 47300
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl
O-(3-methyl-4-nitrophenyl) ester (9 CI)

Elaol
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Endrex
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Endricol
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Endrin
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

ENT 15,152
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

ENT 25,584
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,715
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

ENT 25,719
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

ENT 7,796
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ENT-1506
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

ENT-16225
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Entomoxan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

EOSA
Iron

EP 30
Phenol, pentachloro-

Epoxyheptachlor
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Estonate
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Estonox
Toxaphene

Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl)
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Ethylhexyl phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Eviplast 80
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Eviplast 81
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Experimental Insecticide 269
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Falithion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Fenition
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Fenitrothion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Fermine
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Ferrovac E
Iron

Flexisel
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Flexol DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Folithion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Forst-Hexen
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Fungifen
Phenol, pentachloro-

Gallium
Gallium

Gamma benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-aminopyridine
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

gamma-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-Hexachlorobenzene
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gammater
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

GC 1283
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Geniphene
Toxaphene

Genoplast B
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Gentamicin
Gentamicin

Gentamycin
Gentamicin

Gesafid
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gesarol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Glucinium
Beryllium

GPKh
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Grey arsenic
Arsenic

Grundier Arbezol
Phenol, pentachloro-

HCE
Benzene, hexachloro-

HCC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCDD
Dibenzo(b,e)(1,4)dioxin, hexachloro-

HCE
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Heclotox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HEOD
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Hepta
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor epoxide
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Heptachlorane
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlorodibenzo-p-dioxin
Dibenzo(b,e)(1,4)dioxin, heptachloro-

Hercules 3956
Toxaphene

Hexa
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorobenzene
Benzene, hexachloro-

Hexachlorocyclopentadiene dimer
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Hexachlorodibenzo-p-dioxin
Dibenzo(b,e)(1,4)dioxin, hexachloro-

Hexadrin
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Hexaplas M/B
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Hexavera
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexicide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexyclan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HGI
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hortex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hungaria L 7
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Illoxol
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Insectlack
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Intox
Chlordane

Intox [insecticide]
Chlordane

Iron
Iron

Isothiocyanate
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Isothiocyanic acid, ion (1-)
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Ivcran
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Jacutin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Julin's carbon chloride
Benzene, hexachloro-

Kafar copper
Copper

Kanfochlor
Toxaphene

Kelametazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Kodaflex DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Kokotine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Kombi-Albertan
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

KS-4
Lead

Kwell
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Kypchlor
Chlordane

L 3
Silver

Lauxtol
Phenol, pentachloro-

Lead
Lead

Lead Flake
Lead

Lead S2
Lead

Lendine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lentox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lidenal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindator
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindosep
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lintox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Linvur
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Liroprem
Phenol, pentachloro-

Lotamine
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Loha
Iron

Lorexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

M 1
Copper

M 3
Copper

M 4
Copper

M 5055
Toxaphene

Manganese
Manganese

Mefanal
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Melipax
Toxaphene

Mendrin
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Meonine
Methionine, DL- (8 CI); DL-Methionine (9 CI)

MFF
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

MFF [pesticide]
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Mercury
Mercury

Mermeth
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Mertionin
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Metallic arsenic
Arsenic

Metallic tin
Tin

Metathion E 50
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metathione
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metathionine E50
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metathoin
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metation
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metation E50
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Methilanin
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Methyl mercury ion
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury ion(1+)
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(II) cation
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(1+)
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylnitrophos
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Metione
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Me1700
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Miglawik F
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Millol 49
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mipax
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Mirex
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Monsanto CP 47114
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Montrel
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Moth flakes
Naphthalene

Moth Snub D
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Mszycol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mutoxan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

M1 [copper]
Copper

M2 [copper]
Copper

M3 [copper]
Copper

M33
Copper

M31
Copper

M4 [copper]
Copper

N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N(1)-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

n-Butyl phthalate
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Naphthaline
Naphthalene

Naphthene
Naphthalene

Neasina
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neazina
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neo-Scabicidol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Neocid
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neocidol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neston
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Nexen FB
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit-stark
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexol-E
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ni 0901-S(Harshaw)
Nickel

Ni 270
Nickel

Ni 4303T
Nickel

Nickel
Nickel

Nickel NP2
Nickel

Nickel 270
Nickel

Nicochloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nitrophos
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

No Bunt
Benzene, hexachloro-

No Bunt Liquid
Benzene, hexachloro-

No Bunt 40
Benzene, hexachloro-

No Bunt 80
Benzene, hexachloro-

Nonachlor, cis
4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

NP2
Nickel

NTM
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Nuvanol
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

o,p'-DDT
Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

OCDD
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

Octa-Klor
Chlordane

Octachlor epoxide
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Octachlorodibenzo(b,e)(1,4)dioxin
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

Octachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

Octachlorodibenzodioxin
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

Octalox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Octoil
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Octylphthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

OFHC Cu
Copper

Oktanex
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Olecsumifene
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Omnitox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

OMS 43
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Ovadofos
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Ovadziak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Owadofos
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Owadziak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Oxychlordan
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,5a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Oxychlordane
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

p-Aminopyridine
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

p,p'-DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-DDT
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyl-2,2-dichloroethylene
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-TDE
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Palatinol AH
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Palatinol C
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Palatinol M
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Parachlorocidum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Paramex
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

PBB
Polybrominated biphenyls (No postings in CHEMLINE).

PCB
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

PCB 1254
Arochlor 1254

PCB 1260
Arochlor 1260

PCBs
Toxaphene

PCN
Polychlorinated naphthalenes (No postings in CHEMLINE).

PCP
Phenol, pentachloro-

PDD1
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pedraczak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Penchlorol
Phenol, pentachloro-

Penphene
Toxaphene

Penta
Phenol, pentachloro-

Pentachlorin
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pentachlorophenol
Phenol, pentachloro-

Pentachlorophenyl chloride
Benzene, hexachloro-

Penticidum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Perchlorobenzene
Benzene, hexachloro-

Perchlorodihomocubane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclo(5.2.1.0(2,6).0(3,9).0(5,8))decane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclodecane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Persasan
Phenol, pentachloro-

Pflanzol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Phenacide
Toxaphene

Phenatox
Toxaphene

Phenitrothion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Phillips 1861
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

Photomirex
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-

Phthalic acid dioctyl ester
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Pirmazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (9 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Pitayine
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

Pittsburgh PX-138
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Polybrominated biphenyls
Polybrominated biphenyls (No postings in CHEMLINE).

Polychlorinated dibenzofurans
Polychlorinated dibenzofurans (No postings in CHEMLINE).

Polychlorinated naphthalenes
Polychlorinated naphthalenes (No postings in CHEMLINE).

Polychlorocamphene
Toxaphene

Polycizer DBP
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

PX 104
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

PZh-1M3
Iron

PZh-2
Iron

PZh1M1
Iron

PZh2M
Iron

PZh2M1
Iron

PZh2M2
Iron

PZh3
Iron

PZh3M
Iron

PZh4M
Iron

Quellada
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Quicksilver
Mercury

R 20
Chloroform (8 CI); Methane, trichloro- (9 CI)

R 20 [refrigerant]
Chlo form (8 CI); Methane, trichloro- (9 CI)

Racemethionine
Methionine, DL- (8 CI); DL-Methionine (9 CI)

Rasor
Thallium

Raney alloy
Nickel

Raney copper
Copper

Raney nickel
Nickel

RCH 55/5
Nickel

Red Shield
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Regulus of antimony
Antimony

Repeftal
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Rhodanide
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Rhodiachlor
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Rhothane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Ruelene
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

Ruelene drench
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

S 112A
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

S 5660
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

S-Mex
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sang-gamma
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sanocide
Benzene, hexachloro-

Santophen 20
Phenol, pentachloro-

SD 3817
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro- endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

SD 3819
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)

Selenium
Selenium

Shell Silver
Silver

Sicol 150
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Silflake 135
Silver

Silicon
Silicon

Silver
Silver

Silver atom
Silver

Silver Matt Powder
Tin

Silver metal
Silver

Sniecidotox
Benzene, hexachloro-

Solvanom
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Solvarone
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

Spanbolet
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Spritz-Rapidin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Spruehpflanzol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sr 999
Silver

Staflex DBP
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Staflex DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Stibium
Antimony

Streunex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Strobane T
Toxaphene

Sulfadiazerazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazesin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazesine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazethyldiazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazidin
Sulfanilamide, N(1)-(5,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimidine
Sulfanilamide, N(1)-(5,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadine
Sulfanilamide, N(1)-(5,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethizine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfix
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodimesin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodimezine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulmet
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethasine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphodimezine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sumithion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Superseptil
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Superseptyl
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

SUY E-2
Iron

Synthetic 3956
Toxaphene

SO
Lead

S1
Lead

Tafidex
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Tap 85
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Tar camphor
Naphthalene

TCDBD
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI)

TCDD
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI)

TDE
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Technical Chlordane
Chlordane

Tellurium
Tellurium

Tersitox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Tetrachlorodiphenyl ethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Thallium
Thallium

Thiocyanate
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Thiocyanate (1-)
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Thiocyanate anion
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Thiocyanate ion
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Thiocyanate ion (1-)
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Thiocyanide
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI)

Tin
Tin

Tin Flake
Tin

Tin Powder
Tin

Toxakil
Toxaphene

Toxaphen
Toxaphene

Toxichlor
Chlordane

Toxyphen
Toxaphene

trans-Chlordan
4,7-Methanoindan, 1beta,2alpha,3alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

trans-Chlordane
4,7-Methanoindan, 1beta,2alpha,3alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)

trans-Nonachlor
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,9-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

Tri-6
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Trichlorobis(4'-chlorophenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Trichloroform
Chloroform (8 CI); Methane, trichloro- (9 CI)

Trichloromethane
Chloroform (8 CI); Methane, trichloro- (9 CI)

Truflex DOP
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Unexan-Koeder
Chlordane

Unimoll DB
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Unimoll DM
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)

V 9
Silver

Vanadium
Vanadium

Vanadium-51
Vanadium

Velsicol 104
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Velsicol 1068
Chlordane

Velsicol 53-CS-17
4,7-Methanoindan, 1,4,5,6,7,8,9-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Verthion
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

Vertolan
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Vertolin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Vestinol AH
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Vinicizer 80
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Viton
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

VRI 10-3
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

Wasg
Tin

White tar
Naphthalene

Witcizer
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

Witcizer 300
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)

Zerdane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Zinc
Zinc

009
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

1,1-Bis(p-chlorophenyl)-2,2-dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(4-chlorophenyl)-2,2-dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,2-Benzenedicarboxylic acid, bis(ethylhexyl)ester
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

1,2,3,4,6,7,8,9-Octachlorodibenzodioxin
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI)

1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene
Chlordane

1,2,4,5,6,7,8,8-Octachloro-3a,4,7,7a-tetrahydro-4,7-methanoindan
Chlordane

1,2,4,5,6,7,8,8-Octachloro-4,7-methane-3a,4,7,7a-tetrahydroindane
Chlordane

1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

1721 Gold
Copper

2-(p-Aminobenzenesulfonamido)-4,6-dimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2-(2-chlorphenyl)-2-(4-chlorophenyl)-1,1,1-trichloroethane
Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

2-Ethylhexyl phthalate
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)

2-Sulfanilamido-4,6-dimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

2,2-Bis(4-chlorophenyl)-1,1-dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

2,3,6,7-Tetrachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,3,7,8-TCDD
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,3,7,8-Tetrachlorodibenzo-(b,e)(1,4)dioxan
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,3,7,8-Tetrachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,3,7,8-Tetrachlorodibenzo-1,4-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,4'-DDT
Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

3-Chlorochlordene
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

3,4-Benz(a)pyrene
Benzo(a)pyrene

3,4-Benzopyrene
Benzo(a)pyrene

3,4-Benzopyrene [carcinogen]
Benzo(a)pyrene

3a,4,7,7a-Tetrahydro-4,7-methanoindene
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)

4-Aminopyridine
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

4-Pyridylamine
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI)

4-tert-Butyl-2-chlorophenyl methyl methylphosphoramidate
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)

4,4'-DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

4,4'-DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

4,4'-Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

4,6-Dimethyl-2-sulfanilamidopyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

6-Methoxy-alpha-(5-vinyl-2-quinuclidinyl)-4-quinolinemethanol
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)

666
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

8-Hydromirex
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-

8-Monohydromirex
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-

8057HC
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)

# APPENDIX D

## Animals, Tissues, and Body Fluids in Data Base (1981-1982)

# ANIMALS

Antelope, pronghorn
Ark shell
Avocet
Bass, black sea
Bass, largemouth
Bass, sea
Bass, smallmouth
Bass, striped
Bass, white
Bat, big brown
Bat, little brown
Beaver
Bigeye, spot finned
Blackbird, redwing
Bluefish
Bluegill
Booby, Peruvian
Buffalo, smallmouth
Buffalo, water
Bullhead
Bullhead, black
Bullhead, brown
Burbot
Butterfish
Carp
Carpsucker, river
Catfish, blue
Catfish, channel
Catfish, flathead
Catfish, giant
Catshark, ridge-back
Cattle
Chicken
Chubsucker, Greek
Cichlid
Clam, surf
Cobia
Cod
Coot, American
Cormorant, Guanay
Cormorant, red-legged
Coyote
Crab
Crane, greater sandhill
Crappie
Crappie, black
Crappie, white
Crayfish
Croaker
Crocodile, American
Crow
Deer, mule
Deer, whitetail
Dogfish
Dolphin
Dolphin, white-beaked
Duck
Duck, black
Duck, mallard
Duck, wood
Dunlin
Eagle, bald
Earthworm
Eel, common

Egret, cattle
Eider, common
Falcon, prairie
Fish
Flounder
Flounder, starry
Flounder, summer
Gannet, Norwegian
Geese, snow
Goatfish, blackstripe
Goby
Grebe, western
Grouper, greasy
Grouse, ruffed
Gull, great black-backed
Gull, herring
Gull, laughing
Hake, red
Hare
Hare, snowshoe
Heron, Louisiana
Ibis, glossy
Ibis, white
Johnfish, silver
Kestrel
Kestrel, American
Lagesild
Lizardfish, greater
Lobster
Mackerel
Mackerel, barred Spanish
Mackerel, rakegilled
Mackerel, shortbodied
Magpie
Mink
Minnow, sheepshead
Monkey
Monoclebream, lattice
Mosquitofish
Mouse
Mouse, deer
Mouse, field
Mouse, white-footed
Mouse, wood
Mullet
Mullet, gray
Muskellunge
Mussel, bay
Mussel, blue
Mussel, common
Octopus, Mediterranean
Osprey
Otter
Owl, barn
Oyster
Oyster, American
Oyster, Pacific
Oystercatcher, American
Perch
Perch, yellow
Pheasant, ring-necked
Pigeon, domestic
Pike, northern
Pomfret, black
Porpoise, harbor
Pumpkin seed
Quahog
Quail, Japanese

Rabbit
Rabbit, cottontail
Rabbit, swamp
Raccoon
Rail, sora
Reindeer
Runner, rainbow
Salmon
Salmon, coho
Sanderling
Sandpiper, least
Sandpiper, western
Scallop, sea
Scup
Seal
Seal, grey
Seal, harbor
Shad, American
Shad, gizzard
Shark, mako
Shearwater, sooty
Sheep
Shrew
Shrew, common
Shrew, short-tailed
Shrimp
Shrimp, brown
Shrimp, freshwater
Shrimp, marine
Smelt, rainbow
Snake
Snake, garter
Snake, water
Snapper, malabar
Snapper, red
Sole, rock
Sparrow, house
Sparrowhawk
Spinefoot, whitespotted
Spot
Squid
Squirrel, gray
Starling
Stingray, pale-edged
Sucker
Sucker, Utah
Sunfish, bluegill
Surf clam, thin-shelled
Swan, mute
Swine
Swordfish
Tern, Inca
Tern, sooty
Threadfin, sixtooth
Tickletall
Toad
Trevally, barebreast
Trevally, slender
Trevally, torpedo
Trout
Trout, brook
Trout, brown
Trout, lake
Trout, rainbow
Tuna
Tuna, albacore
Tuna, bluefin
Tuna, skipjack
Tuna, wahoo
Tuna, yellowfin

Turnstone, ruddy
Turtle, box
Turtle, green
Turtle, loggerhead
Turtle, slider
Turtle, snapping
Vole, bank
Vole, meadow
Vole, red-backed
Vulture, king
Walleye
Whitefish, lake
Willet
Yellowlegs, greater
Yellowlegs, lesser

# TISSUES AND BODY FLUIDS

Abdomen
Adipose
Adrenal gland
Air sac
Arachnoid fluid
Bile
Blood
Blood, cells
Blood, plasma
Blood, serum
Blood, whole
Body
Body, whole
Bone
Brain
Cecum
Claws
Digestive gland
Eggs
Epididymis
Eye
Feathers
Fetal
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1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- 1406

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI) 1413

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI) 1423

1H,12H-Furo(3',2':4,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aR-cis)- 1442

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)- 1444

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 1451

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 1458

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI) 1469

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) 1478

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI) 1505

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI) 1512

4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI) 1514

DIRECTORY - FORMULAS


Polybrominated biphenyls (No postings in CHEMLINE). 1220

Polychlorinated dibenzofurans (No postings in CHEMLINE). 1229

Polychlorinated naphthalenes (No postings in CHEMLINE). 1231

Ag
Silver 1302

As
Arsenic 541

B
Boron 620

Be
Beryllium 571

C-H-Cl3
Chloroform (8 CI); Methane, trichloro- (9 CI) 718

C-H3-Hg
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI) 1136

C-N-S
Thiocyanic acid, ion(1-) (8 CI); Thiocyanate (9 CI) 1324

Cd
Cadmium 622

Co
Cobalt 732

Cr
Chromium 721

Cu
Copper 734

C10-Cl12
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- 1496

C10-H-Cl11
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro- 1405

C10-H10-O4
Phthalic acid, dimethyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI) 1218

C10-H12
4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI) 1514

C10-H4-Cl8-O
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 1451

C10-H5-Cl7
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI) 1512

C10-H5-Cl7-O
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 1458

C10-H5-Cl9
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-nexahydro-,
(1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)- 1444

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI) 1469

C10-H6-Cl8
Chlordane 705

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI);
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
(1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) 1478

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI);
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
(1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI) 1505

C10-H8
Naphthalene 1156

C12-C18-O2
Dibenzo-p-dioxin, octachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, octachloro- (9 CI) 813

DIRECTORY - FORMULAS


C12-H-Cl7-O2
Dibenzo(b,e)(1,4)dioxin, heptachloro- 809

C12-H10-Cl2-N2
Benzidine, dichloro- (9 CI); (1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI) 565

C12-H14-N4-O2-S
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI) 1304

C12-H19-Cl-N-O3-P
Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI); Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI) 1206

C12-H2-Cl6-O2
Dibenzo(b,e)(1,4)dioxin, hexachloro- 811

C12-H4-Cl4-O2
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI) 815

C12-H8-Cl6-O
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo-(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI) 1413

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI) 1423

C14-H10-Cl4
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dicaloroethylidene)bis(4-chloro- (9 CI) 827

C14-H8-Cl4
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI) 860

C14-H9-Cl5
DDT, total (No postings in CHEMLINE). 793

Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI) 842

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI) 845

C16-H22-O4
Phthalic acid, dibutyl ester (8 CI); 1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI) 1215

C17-H12-O6
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI) 780

C17-H12-O7
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)- 774

1H,12H-Furo(3',2':4,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aR-cis)- 1442

C18-H36
Dodecane, 1-cyclohexyl- (8 CI); Cyclohexane, dodecyl- (9 CI) 821

C20-H12
Benzo(a)pyrene 568

C20-H24-N2-O2
Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI) 1254

C24-H38-O4
Phthalic acid, bis(2-ethylhexyl) ester (8 CI); 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI) 1211

C5-H11-N-O2-S
Methionine, DL- (8 CI); DL-Methionine (9 CI) 1155

C5-H6-N2
Pyridine, 4-amino- (8 CI); 4-Pyridinamine (9 CI) 1240

C6-Cl6
Benzene, hexachloro- 559

C6-H-Cl5-O
Phenol, pentachloro- 1201

C6-H6-Cl6
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI) 767

DIRECTORY - FORMULAS


Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI) 773

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI) 772

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI) 771

C7-H17-O3-P
Phosphonic acid, methyl-, diisopropyl ester (8 CI); Phosphonic acid, methyl-, bis(1-methylethyl) ester (9 CI) 1204

C9-H12-N-O5-P-S
Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI) 1207

EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Arochlor 1242 (No postings in CHEMLINE). 535

Arochlor 1254 536

Arochlor 1260 539

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI) 573

Gentamicin 904

Toxaphene 1327

Fe
Iron 907

Ga
Gallium 902

Hg
Mercury 1043

Mn
Manganese 1029

Ni
Nickel 1181

Pb
Lead 922

Sb
Antimony 533

Se
Selenium 1255

Si
Silicon 1301

Sn
Tin 1325

Te
Tellurium 1320

Tl
Thallium 1322

V
Vanadium 1335

Zn
Zinc 1360

# DATA BASE

Antimony
7440-36-0
Sb
AtW 121.75, MP 630 C, BP 1635 C, VP 1 mm Hg at 886 C, 10 mm Hg at 960 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 533<br>Liver | | ES | 1 | a) Not applicable<br>b) Not applicable | a) <0.01 ug/g<br>b) <0.01 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 36 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 534<br>Muscle | | ES | 1 | Not applicable | <0.01 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 36 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Arochlor 1242 (No postings in CEPHLINE).
53469-21-9
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Quahog
MERCENARIA MERCENARIA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 535<br>Body | | GC | | 0.26-9.39 ug/g | 2.35 +or- 0.64 ug/g | Collected 10/78 at six locations, 2 yr after effluent elimination from two electronic parts manufacturing plants<br>No significant change from 1976 residue levels<br>Composite samples, length 40-110 mm<br><br>Massachusetts, New Bedford Harbor<br><br>BIVALVES; BODY; MASSACHUSETTS; BIOACCUMULATION; WATER POLLUTION; POLYCHLORINATED BIPHENYLS | Deubert, K.H.<br>Rule, P.<br>Corte-Real, I.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:683-688 |

Arcchlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Quahog
MERCENARIA MERCENARIA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 536<br>Body | | GC | | 0.0-1.06 ug/g | 0.51 +or- 0.1 ug/g | Collected 10/78 at six locations, 2 yr after effluent elimination from two electronic parts manufacturing plants<br>No significant change from 1976 residue levels<br>Composite samples, length 40-110 mm<br><br>Massachusetts, New Bedford Harbor<br><br>MOLLUSKS; BODY; MASSACHUSETTS; BIOACCUMULATION; WATER POLLUTION; POLYCHLORINATED BIPHENYLS | Deubert, K.H.<br>Rule, P.<br>Corte-Real, I.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:683-688 |

Arcchlor 1258
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 537<br>Liver | Ingestion | GC-EC | a) 2<br>b) 2 | a) 456-531 ppb<br>b) 808-1060 ppb<br>Dry wt | a) 894 ppb<br>b) 934 ppb<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 wo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Trout, lake
SALVELINUS NAMAYCUSH

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 538<br>Body | Ingestion | GC | a) 10<br>b) 10<br>c) 10<br>d) 10<br>e) 10<br>f) 10<br>g) 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given | a) 5.1 +or- 0.23 ug/g<br>b) 5.0 +or- 0.26 ug/g<br>c) 6.0 +or- 0.22 ug/g<br>d) 6.2 +or- 0.18 ug/g<br>e) 5.3 +or- 0.24 ug/g<br>f) 7.3 +or- 0.38 ug/g<br>g) 4.5 +or- 0.26 ug/g<br>Wet wt | a) Controls, length 17.3 mm, wt 90.7 g<br>b) 4 days, length 18.0 mm, wt 88.5 g<br>c) 7 days, length 18.8 mm, wt 91.4 g<br>d) 10 days, length 19.6 mm, wt 93.3 g<br>e) 17 days, length 21.5 mm, wt 99.4 g<br>f) 32 days, length 24.8 mm, wt 108.8 g<br>g) 40 days, length 29.5 mm, wt 153.4 g<br>Exposure times in 50 ng/l water, food levels 0.72 ug/g<br>Dry wt and body burden values also given<br>Newly hatched sac fry<br><br>Mortality 12.5% (controls) and 16.6% (treated fry) during 40-day exposure<br><br>JUVENILES; MICHIGAN; BODY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES | Mac, M.J.<br>Seelye, J.G.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 368-375 |

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 539<br>Eggs | | GC-EC | 49 | a) Not detected<br>b) Not applicable<br>c) Not detected-0.84 ppm<br>d) Not detected-1.8 ppm<br>e) Not detected-1.7 ppm<br>f) Not detected-0.95 ppm<br>g) 1.0-1.2 ppm<br>h) 0.62-1.8 ppm<br>i) Not detected<br>j) Not detected-2.9 ppm<br>k) Not detected<br>l) Not detected | a) Not detected<br>b) 0.60 ppm<br>c) 0.25 +or- 0.20 ppm<br>d) 0.34 +or- 0.29<br>e) 0.61 +or- 0.31 ppm<br>f) 0.44 +or- 0.23 ppm<br>g) 1.1 +or- 0.10 ppm<br>h) 1.3 +or- 0.21 ppm<br>i) Not detected<br>j) 0.98 +or- 0.23 ppm<br>k) Not detected<br>l) Not detected | a) Nova Scotia, 3 clutches<br>b) New Brunswick, 1 clutch<br>c) Quebec, 4 clutches<br>d) Maine, 6 clutches<br>e) New Hampshire, 5 clutches<br>f) Vermont, 4 clutches<br>g) Massachusetts, 2 clutches<br>h) Rhode Island, 5 clutches<br>i) Pennsylvania, 1 clutch<br>j) Delaware, 10 clutches<br>k) Maryland, 2 clutches<br>l) Virginia, 6 clutches<br>1 egg/clutch analyzed<br>Collected 1978<br>Shell thickness 0.387 mm, identical to pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDE; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Haseltine, S.D.<br>Mulhern, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |

Arcchlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Turtle, loggerhead
CARETTA CARETTA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 540<br>Eggs | | GC | 9 | 0.032-0.201 ppm wet wt | 0.078 ppm wet wt<br>Geometric mean | Eggs from 9 clutches. Collected as they were laid, frozen after 43-52 d incubation. Significant decrease during incubation<br><br>Florida, Merritt Island<br><br>EGGS; TURTLES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS; FLORIDA | Clark, D.R., Jr.<br>Krynitsky, A.J.<br>1980<br>Pesticides Monitoring Journal 14(1):7-10 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 541<br>Liver | | AAS | 4 | 0.05-0.26 ppm wet wt | 0.10 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 542<br>Liver | | ES | 1 | a) 0.29-0.58 ug/g<br>b) Not applicable<br>Wet wt | a) 0.7 +or- 0.4 ug/g<br>b) 0.71 +or- 0.10 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Weit, H.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

(NEXT PAGE)

Arsenic
7440-38-2
As
Atw 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 583<br>Muscle | | ES | 1 | 0.11-0.46 ug/g wet wt | 0.25 +or- 0.13 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Reit, R.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Arsenic
7440-38-2
As
Atw 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 584<br>Hair | | AAS | 10 | 0.12-0.23 ug/g wet wt | 0.18 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>BABES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |
| 585<br>Kidney | | AAS | 10 | 0.1-0.1 ug/g wet wt | 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>BABES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |
| 586<br>Liver | | AAS | 10 | 0.1-0.1 ug/g wet wt | 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>BABES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 547<br>Eggs | | AAS | 20 | Not given | 0.18 +or- 0.02 ppm | Collected 1978<br>Shell thickness 0.347 mm, identical to pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDE; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Haseltine, S.D.<br>Mulhern, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 548<br>Liver | | AAS | 10 | 0.05-0.35 ppm wet wt | 0.07 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 549<br>Body | | AAS | 2 | Not given | < 0.1 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (W)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 550<br>Body | | AAS | 25 | Not given | < 0.1 ug/g wet wt | 5 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 551<br>Body | | AAS | 5 | Not given | 0.20 ug/g wet wt | Composite sample<br>Trapped near unmined Cu-Zn deposit (Crandon)<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 552<br>Liver | | AAS | 15 | 0.05-1.23 ppm wet wt | 0.14 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br>Texas, Corpus Christi<br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2): 58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Sandpiper, least
CALIDRIS POSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 553<br>liver | | AAS | 16 | 0.05-1.50 ppm wet wt | 0.06 ppm wet wt<br>Geometric mean | Shorebirds, collectd winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 554<br>liver | | AAS | 15 | 0.05-1.10 ppm wet wt | 0.23 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 555<br>Body | | AAS | 10 | Not given | < 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unnamed Cu-Zn deposit (Crandon)<br><br>Wisconsin (8)<br><br>RABIES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Songstad, G.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 556<br>Body | | AAS | 10 | Not given | < 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 557<br>liver | | AAS | 2 | Not applicable | 0.85 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br>Texas, Corpus Christi<br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 558<br>liver | | AAS | 13 | 0.05-0.42 ppm wet wt | 0.10 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br>Texas, Corpus Christi<br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 559<br>Body | | GC | 31 | Not given | 8 ppm lipid wt<br>Geometric mean | 2.2% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 560<br>Brain | | GC | 19 | Not given | 0.15 ppm wet wt<br>Geometric mean | 6.7% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Gannet, Norwegian
MORUS BASSANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 561<br>Eggs | | GC | 96 | Not given | 0.033 +or- 0.0018 ppm wet wt | a) 1972<br>b) 1978<br>c) 1979<br>Addled eggs, collected shortly after laying season<br><br>Norway, Nordmjele<br><br>BIRDS; EGGS; NORWAY; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Fimreite, N.<br>Brevik, E.M.<br>Torp, H.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:58-60 |

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Ingemild
COREGONUS ALBULA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 562<br>Liver | | GC | a) 7<br>b) 24<br>c) 16<br>d) 12<br>e) 13 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.12 +or- 0.09 ppm<br>b) 0.29 +or- 0.36 ppm<br>c) 0.12 +or- 0.10 ppm<br>d) 0.12 +or- 0.02 ppm<br>e) 0.11 +or- 0.05 ppm<br>Lipid wt | a) 1974<br>b) 1975<br>c) 1976<br>d) 1977<br>e) 1979<br>Wt < 0.3 kg, mean age 5.7 yr<br>Collected during spawning season<br>Agricultural, industrial, and urban pollution sources<br><br>Norway (E), Lake Mjosa<br><br>LIVER; NORWAY; DDT; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; WATER POLLUTION | Brevik, E.M.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:679-680 |

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Reindeer
RANGIFER sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 563<br>Adipose | | | 24 | 5-50 ng/g | Not given | From low pesticide use area<br><br>Iceland<br><br>REINDEER; SHEEP; ICELAND; ADIPOSE TISSUE; BIOACCUMULATION; HEXACHLOROCYCLOHEXANE; PENTACHLOROBENZENE | Skaftason, J.F.<br>Johannesson, T.<br>1979<br>Acta Pharmacologica et Toxicologica 44:156-157 |

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, BP 231 C, BP 323-326 C, VP 1 mm Hg at 114.8 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 564<br>Body | Ingestion | GC-EC | a) 8<br>b) 8<br>c) 8<br>d) 8<br>e) 8<br>f) 8<br>g) 8<br>h) 8<br>i) 8<br>j) 8 | a) 2-3 ug/kg<br>b) 4-6 ug/kg<br>c) 134-205 ug/kg<br>d) 182-359 ug/kg<br>e) 6-12 ug/kg<br>f) 199-322 ug/kg<br>g) 270-590 ug/kg<br>h) 6-9 ug/kg<br>i) 194-358 ug/kg<br>j) 445-910 ug/kg | a) 3 ug/kg<br>b) 5 +or- 1 ug/kg<br>c) 175 +or- 21 ug/kg<br>d) 305 +or- 57 ug/kg<br>e) 9 +or- 2 ug/kg<br>f) 228 +or- 41 ug/kg<br>g) 419 +or- 100 ug/kg<br>h) 8 +or- 1 ug/kg<br>i) 276 +or- 50 ug/kg<br>j) 635 +or- 135 ug/kg | a) Controls, mean wt 84 g<br>b) 8 ug/kg for 20 days, mean wt 125 g<br>c) 394 ug/kg for 20 days, mean wt 114 g<br>d) 780 ug/kg for 20 days, mean wt 129 g<br>e) 8 ug/kg for 35 days, mean wt 167 g<br>f) 394 ug/kg for 35 days, mean wt 166 g<br>g) 780 ug/kg for 35 days, mean wt 150 g<br>h) 8 ug/kg for 57 days, mean wt 235 g<br>i) 394 ug/kg for 57 days, mean wt 208 g<br>j) 780 ug/kg for 57 days, mean wt 246 g<br>Subadults<br><br>CANADA; BODY; HEXACHLOROBENZENE; BIOACCUMULATION; FISHES | Niimi, A.J.<br>Cho, C.Y.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:834-839 |

Benzidine, dichloro- (8 CI)
(1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI)
1331-47-1
C12-H10-C12-N2
MW 253.14
Sunfish, bluegill
LEPOMIS MACROCHIRUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 565<br>Body | | Radiometry | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6<br>f) 6<br>g) 6<br>h) 6<br>i) 6<br>j) 6<br>k) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 1.902 +or- 0.049 ppm<br>b) 1.815 +or- 0.086 ppm<br>c) 1.902 +or- 0.200 ppm<br>d) 1.867 +or- 0.327 ppm<br>e) 2.180 +or- 0.090 ppm<br>f) 14.822 +or- 1.097 ppm<br>g) 29.536 +or- 1.686 ppm<br>h) 29.154 +or- 0.640 ppm<br>i) 48.174 +or- 2.074 ppm<br>j) 56.438 +or- 0.987 ppm<br>k) 50.978 +or- 2.198 ppm | a) 24 hr at 5 ppm<br>b) 48 hr at 5 ppm<br>c) 72 hr at 5 ppm<br>d) 96 hr at 5 ppm<br>e) 120 hr at 5 ppm<br>f) 24 hr at 0.1 ppm<br>g) 48 hr at 0.1 ppm<br>h) 72 hr at 0.1 ppm<br>i) 96 hr at 0.1 ppm<br>j) 120 hr at 0.1 ppm<br>k) 168 hr at 0.1 ppm<br>Exposure times to [C 14] DCB in water<br>Whole fish<br>5 ppm concentration factor (CF)=495, 0.1 ppm CF=507<br>Acid-labile DCB conjugate is only metabolite detected<br>Commercial hatchery fishes, length 2-3 in.<br><br>BODY; MUSCLES; NEW YORK; BIOACCUMULATION; FISHES; METABOLITES; CHLORINE ORGANIC COMPOUNDS | Appleton, H.T.<br>Sikka, H.C.<br>1980<br>Environmental Science and Technology 14(1):50-54 |

(NEXT PAGE)

Benzidine, dichloro- (8 CI)
(1,1'-Biphenyl)-4,4'-diamine, dichloro- (9 CI)
1331-47-1
C12-H10-C12-N2
MW 253.14
Sunfish, bluegill
LEPOMIS MACROCHIRUM

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 566<br>Head | | Radiometry | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6<br>f) 6<br>g) 6<br>h) 6<br>i) 6<br>j) 6<br>k) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 3.796 +or- 0.027 ppm<br>b) 3.246 +or- 0.362 ppm<br>c) 3.150 +or- 0.546 ppm<br>d) 3.285 +or- 0.001 ppm<br>e) 3.719 +or- 0.465 ppm<br>f) 28.771 +or- 4.198 ppm<br>g) 54.388 +or- 7.789 ppm<br>h) 47.737 +or- 3.097 ppm<br>i) 82.830 +or- 7.430 ppm<br>j) 81.235 +or- 3.352 ppm<br>k) 85.776 +or- 7.413 ppm | a) 24 hr at 5 ppm<br>b) 48 hr at 5 ppm<br>c) 72 hr at 5 ppm<br>d) 96 hr at 5 ppm<br>e) 120 hr at 5 ppm<br>f) 24 hr at 0.1 ppm<br>g) 48 hr at 0.1 ppm<br>h) 72 hr at 0.1 ppm<br>i) 96 hr at 0.1 ppm<br>j) 120 hr at 0.1 ppm<br>k) 168 hr at 0.1 ppm<br>Exposure times to [C 14] DCB in water<br>Head, gills, internal organs<br>5 ppm concentration factor (CF)=856, 0.1 ppm CF=814<br>Acid-labile DCB conjugate is only metabolite detected<br>Commercial hatchery fishes, length 2-3 in.<br><br>ECDY; MUSCLES; NEW YORK; BIOACCUMULATION; FISHES; METABOLITES; CHLORINE ORGANIC COMPOUNDS | Appleton, H.T.<br>Sikka, H.C.<br>1980<br>Environmental Science and Technology<br>14(1):50-54 |
| 567<br>Muscle | | Radiometry | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6<br>f) 6<br>g) 6<br>h) 6<br>i) 6<br>j) 6<br>k) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 0.062 +or- 0.010 ppm<br>b) 0.394 +or- 0.036 ppm<br>c) 0.493 +or- 0.038 ppm<br>d) 0.356 +or- 0.007 ppm<br>e) 0.587 +or- 0.015 ppm<br>f) 2.390 +or- 0.052 ppm<br>g) 5.333 +or- 0.586 ppm<br>h) 6.944 +or- 0.696 ppm<br>i) 17.726 +or- 0.616 ppm<br>j) 16.142 +or- 1.886 ppm<br>k) 18.360 +or- 0.622 ppm | a) 24 hr at 5 ppm<br>b) 48 hr at 5 ppm<br>c) 72 hr at 5 ppm<br>d) 96 hr at 5 ppm<br>e) 120 hr at 5 ppm<br>f) 24 hr at 0.1 ppm<br>g) 48 hr at 0.1 ppm<br>h) 72 hr at 0.1 ppm<br>i) 96 hr at 0.1 ppm<br>j) 120 hr at 0.1 ppm<br>k) 168 hr at 0.1 ppm<br>Exposure times to [C14] DCB in water<br>Edible flesh, bones, scales and skin<br>5 ppm concentration factor [CF]=118, 0.1 ppm CF=170<br>Acid-labile DCB conjugate is only metabolite detected<br>Commercial hatchery fishes, length 2-3 in.<br><br>BODY; MUSCLES; NEW YORK; BIOACCUMULATION; FISHES; METABOLITES; CHLORINE ORGANIC COMPOUNDS | Appleton, H.T.<br>Sikka, H.C.<br>1980<br>Environmental Science and Technology<br>14(1):50-54 |

Benzo(a) pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Mussel, bay
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 568<br>Body | | TLC | a) 30<br>b) 30<br>c) 30<br>d) 30<br>e) 30<br>f) 30<br>g) 30<br>h) 30<br>i) 30 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 66.0 ug/kg<br>b) 45.0 ug/kg<br>c) 30.7 ug/kg<br>d) 19.8 ug/kg<br>e) 27.2 ug/kg<br>f) 36.8 ug/kg<br>g) 42.2 ug/kg<br>h) 16.6 ug/kg<br>i) 20.0 ug/kg<br>Wet wt | a) 1/9/79<br>b) 1/22/79<br>c) 2/2/79<br>d) 2/15/79<br>e) 3/13/79<br>f) 4/16/79<br>g) 4/20/79<br>h) 5/3/79<br>i) 5/25/79<br>Composite samples<br>Length 40-60 mm<br><br>Oregon, Yaquina Bay<br><br>GONADS; SOMATIC TISSUE; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; SEASONAL VARIATIONS; OREGON; BODY; BIOACCUMULATION; WATER POLLUTION | Nix, M.C.<br>Hemingway, S.J.<br>Schaffer, R.L.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:46-51 |
| 569<br>Gonads | | TLC | a) 30<br>b) 30<br>c) 30<br>d) 30<br>e) 30<br>f) 30<br>g) 30<br>h) 30<br>i) 30 | a) Not given b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 31.4 ug/kg<br>b) 50.7 ug/kg<br>c) 42.3 ug/kg<br>d) 13.5 ug/kg e) 39.5 ug/kg<br>f) 21.8 ug/kg<br>g) 30.4 ug/kg<br>h) 30.2 ug/kg<br>i) 4.2 ug/kg<br>Wet wt | a) 1/9/79<br>b) 1/22/79<br>c) 2/2/79<br>d) 2/15/79<br>e) 3/13/79<br>f) 4/16/79<br>g) 4/20/79<br>h) 5/3/79<br>i) 5/25/79<br>Composite samples<br>Animal length 40-60 mm, gonad weights 2.9-5.6 g<br><br>Oregon, Yaquina Bay<br><br>GONADS; SOMATIC TISSUE; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; SEASONAL VARIATIONS; OREGON; BODY; BIOACCUMULATION; WATER POLLUTION | Nix, M.C.<br>Hemingway, S.J.<br>Schaffer, R.L.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:46-51 |
| 570<br>Somatic | | TLC | a) 30<br>b) 30<br>c) 30<br>d) 30<br>e) 30<br>f) 30<br>g) 30<br>h) 30<br>i) 30 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 70.4 ug/kg<br>b) 43.9 ug/kg<br>c) 29.2 ug/kg<br>d) 20.9 ug/kg<br>e) 25.3 ug/kg<br>f) 38.7 ug/kg<br>g) 44.9 ug/kg<br>h) 13.3 ug/kg<br>i) 22.6 ug/kg<br>Wet wt | a) 1/9/79<br>b) 1/22/79<br>c) 2/2/79<br>d) 2/15/79<br>e) 3/13/79<br>f) 4/16/79<br>g) 4/20/79<br>h) 5/3/79<br>5/25/79<br>Gonads and byssal threads removed<br>Composite samples<br>Animal length 40-60 mm, somatic tissue weights 17.9-37.4 g<br><br>Oregon, Yaquina Bay<br><br>GONADS; SOMATIC TISSUE; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; SEASONAL VARIATIONS; OREGON; BODY; BIOACCUMULATION; WATER POLLUTION | Nix, M.C.<br>Hemingway, S.J.<br>Schaffer, R.L.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:46-51 |

Beryllium
7440-41-7
Be
AtW 9.01218, MP 1287 C, BP 2500 C, VP 1 mm Hg at 1520 C, 10 mm Hg at 1860 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 571<br>Liver | | AAS | 1 | a) Not applicable<br>b) Not applicable | a) <0.001 ug/g<br>b) <0.001 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |
| 572<br>Muscle | | AAS | 1 | Not applicable | <0.001 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant difference among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 573<br>Body | | GC-EC | 4 | 0.1-3.0 ppm wet wt | 0.79 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 574<br>Muscle | | GC-EC | 8 | Not given | 50 ng/g<br>Median | 100 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, white
MORONE CHRYSOPS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 575<br>Muscle | | GC-EC | 14 | Not given | 75 ng/g<br>Median | 110 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDE; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 576<br>Muscle | | GC-EC | 13 | Not given | 185 ng/g<br>Median | 1100 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriv (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Carp
CYPRINUS CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 577<br>Muscle | | GC-EC | 7 | Not given | 50 ng/g<br>Median | 100 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriv (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 578<br>Muscle | | GC-EC | 11 | Not given | 100 ng/g<br>Median | 300 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriv (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Catfish, blue
ICTALURUS FURCATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 579<br>Muscle | | GC-EC | 2 | Not given | 50 ng/g<br>Median | 100 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 580<br>Muscle | | GC-EC | 7 | Not given | 50 ng/g<br>Median | 160 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Catfish, flathead
PYLODICTUS OLIVARUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 581<br>Muscle | | GC-EC | 1 | Not applicable | 120 ng/g | Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Cod
GADUS MORHUA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 582<br>Liver | | | a) 15<br>b) 21<br>c) 17 | a) 2.15-10.9 ng/kg<br>b) 0.57-9.65 ng/kg<br>c) 2.26-1.62 ng/kg | a) 5.25 +or- 2.46 ng/kg<br>b) 2.99 +or- 1.78 ng/kg<br>c) 2.26 +or- ng/kg | a) Kotka, Gulf of Bothnia<br>b) Hanko, Gulf of Finland<br>c) Pori, Gulf of Finland<br>Significantly higher levels in Gulf of Finland samples<br>2 yr olds, length 25-35 cm, collected as by-catch of herring-trawl<br><br>Baltic Sea (M), Finnish coast<br><br>BIOACCUMULATION; FISHES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; LIVER; FINLAND | Wickstrom, K.<br>Pyysalo, H.<br>Perttila, M.<br>1981<br>Chemosphere 10(9):999-1004 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crappie, white
POMOXIS ANNULARUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 583<br>Muscle | | GC-EC | 19 | Not given | 100 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>CHIAROMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.M.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Dolphin, white-beaked
LAGENORHYNCHUS ALBIROSTRIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 584<br>Adipose | | GC | 5 | 119-225 ng/kg lipid wt | 169 ng/kg lipid wt | Drowned in fishing net, ages 4-14 yr<br>Blubber, some muscle<br><br>North Sea, Scotland (E)<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, H.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 585<br>Body | | GC-EC | 13 | 0.5-8.0 ppm wet wt | 1.19 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 586<br>Body | | GC | 91 | Not given | 380 ppm lipid wt<br>Geometric mean | 4.4% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 587<br>Brain | | GC | 91 | Not given | 3.75 ppm wet wt<br>Geometric mean | 6.7% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gannet, Norwegian
MORUS BASSANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 588<br>Eggs | | GC | a) 10<br>b) 11<br>c) 14 | a) Not given<br>b) Not given<br>c) Not given | a) 7.7 +or- 4.6 ppm<br>b) 3.5 +or- 1.7 ppm<br>c) 2.0 +or- 1.7 ppm | a) 1972<br>b) 1978<br>c) 1979<br>Addled eggs, collected shortly after laying season<br><br>Norway, Nordsjele<br><br>BIRDS; EGGS; NORWAY; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Fimreite, N.<br>Brevik, E.M.<br>Torp, H.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:58-60 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, laughing
LARUS ATRICILLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 589<br>Eggs | | GC-EC | a) 10<br>b) 11 | a) Not detected-9.5 ug/g<br>b) Not detected-4.8 ug/g<br>Wet wt | a) 2.6 ug/g<br>b) 1.6 ug/g<br>Wet wt<br>Geometric means | a) 1971<br>b) 1975<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DET; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (9 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Ibis, glossy
PLEGADIS FALCINELLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 590<br>Eggs | | GC-EC | 10 | Not detected-0.6 ug/g wet wt | Not given | 1972<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DET; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (3 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Ibis, white
EUDOCIMUS ALBUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 591<br>Eggs | | GC-EC | a) 10<br>b) 10 | a) Not detected-1.2 ug/g<br>b) Not detected-1.8 ug/g<br>Wet wt | a) Not given<br>b) 0.6 ug/g<br>Wet wt<br>Geometric means | a) 1972<br>b) 1974<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DET; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Kestrel
FALCO TINNUNCULUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 092<br>Kidney | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 470 +or- 40 ppb<br>b) 320 +or- 20 ppb<br>c) 170 +or- 6 ppb<br>d) 210 +or- 20 ppb<br>e) 50 +or- 2 ppt<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Dry wt also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 093<br>Liver | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 350 +or- 30 ppb<br>b) 150 +or- 10 ppb<br>c) 47 +or- 3 ppb<br>d) 230 +or- 20 ppb<br>e) 7 +or- 1 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Dry wt also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 094<br>Muscle | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 200 +or- 10 ppb<br>b) 40 +or- 2 ppb<br>c) 25 +or- 2 ppb<br>d) 50 +or- 5 ppb<br>e) 20 +or- 2 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Pectoral muscle<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Ingensild
COREGONUS ALBULA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 595<br>Liver | | GC | a) 7<br>b) 24<br>c) 16<br>d) 12<br>e) 13 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 6.7 +or- 3.5 ppm<br>b) 1.5 +or- 2.5 ppm<br>c) 1.4 +or- 1.0 ppm<br>d) 4.1 +or- 1.2 ppm<br>e) 3.4 +or- 0.7 ppm<br>Lipid wt | a) 1974<br>b) 1975<br>c) 1976<br>d) 1977<br>e) 1979<br>Wt < 0.3 kg, mean age 5.7 yr<br>Collected during spawning season<br>Agricultural, industrial, and urban pollution sources<br><br>Norway (E), Lake Mjosa<br><br>LIVER; NORWAY; DDT; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; WATER POLLUTION | Brevik, E.M.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:679-680 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Mullet, gray
CHELON LABROSUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 596<br>Body | Ingestion | GC | a) 4<br>b) 4<br>c) 4<br>d) 4<br>e) 4<br>f) 4 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 3.0 +or- 0.3 ppm<br>b) 3.8 +or- 0.2 ppm<br>c) 5.1 +or- 0.9 ppm<br>d) 4.3 +or- 0.4 ppm<br>e) 6.1 +or- 1.5 ppm<br>f) 7.1 +or- 1.4 ppm | a) 8 d, 2.5 yr olds<br>b) 15 d, 2.5 yr olds<br>c) 30 d, 2.5 yr olds<br>d) 8 d, 3.5 yr olds<br>e) 15 d, 3.5 yr olds<br>f) 30 d, 3.5 yr olds<br>Days on dry fish diet contaminated with 50 ug/g Phenoclor DP6<br>2.5 yr old group, wt 30-46 g, length 16-17 cm. 3.5 yr old group, wt 66-139 g, length 20-24 cm<br><br>FRANCE; AGE; BODY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES | Narbonne, J.F.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 22:65-68 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Osprey
PANDION HALIAETUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 597<br>Eggs | | | a) 8<br>b) 7 | a) 0-7.4 ppm<br>b) 3.1-40.8 ppm<br>Lipid wt | a) Not given<br>b) 20.2 +or- 11.2 ppm<br>Lipid wt | a) 1971, shell thickness 0.43-0.59 mm, 2.3-4.8% fat<br>b) 1972, shell thickness 0.42-0.52 mm, 4.4-5.8% fat<br>Normal shell thickness = 0.5 mm<br><br>Gulf of California<br><br>BIRDS; EGGS; CALIFORNIA; MEXICO; CHLORINE ORGANIC COMPOUNDS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Henny, C.J.<br>Anderson, D.W.<br>1979<br>Bulletin of the Southern Academy of Sciences 78(2):89-106 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Owl, barn
TYTO ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 598<br>Kidney | | GC/MS | 1 | Not applicable | 160 +or- 15 ppb wet wt<br>(730 +or- 60 ppb dry wt) | Tisbury, Somerset (country district)<br>Dead from known cause, not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 599<br>Liver | | GC/MS | 1 | Not applicable | 37 +or- 3 ppb wet wt<br>(130 +or- 10 ppb dry wt) | Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 600<br>Muscle | | GC/MS | 1 | Not applicable | 17 +or- 2 ppb wet wt<br>(70 +or- 8 ppb dry wt) | Pectoral muscle<br>Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPETHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Oystercatcher, American
HAEMATOPUS PALLIATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 601<br>Eggs | | GC-EC | a) 10<br>b) 13 | a) Not detected-1.0 ug/g<br>b) Not detected-0.7 ug/g<br>Wet wt | a) 0.8 ug/g<br>b) 0.5 ug/g<br>Wet wt<br>Geometric means | a) 1972<br>b) 1975<br>Shell thickness not significantly different (P<0.05) from pre-1947 eggs<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Quahog
MERCENARIA MERCENARIA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 602<br>Body | | GC | | 0.35-6.93 ug/g | 2.86 +or- 0.73 ug/g | Collected 10/78 at six locations, 2 yr after effluent elimination from two electronic parts manufacturing plants<br>No significant change from 1976 residue levels<br>Composite samples, length 40-110 mm<br><br>Massachusetts, New Bedford Harbor<br><br>MOLLUSKS; BODY; MASSACHUSETTS; BIOACCUMULATION; WATER POLLUTION; POLYCHLORINATED BIPHENYLS | Deubert, K.H.<br>Hule, P.<br>Corte-Real, I.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:683-688 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 603<br>Body | | GC-EC | 15 | 2.4-18 ppm wet wt | 6.64 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 604<br>Body | | GC-EC | 30 | 0.8-3.6 ppm wet wt | 0.67 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 605<br>Body | | GC-EC | 22 | 0.2-4.3 ppm wet wt | 0.95 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Seal, harbor
PHOCA VITULINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 606<br>Adipose | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 557 mg/kg<br>b) 120 mg/kg<br>c) 661 mg/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br>Blubber, some muscle in IJmuiden seal<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 607<br>Brain | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 73 mg/kg<br>b) 9 mg/kg<br>c) 215 mg/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 608<br>Liver | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 220 mg/kg<br>b) 63 mg/kg<br>c) 1570 mg/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 609<br>Muscle | | GC-EC | 18 | Not given | 105 ng/g<br>Median | 460 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sparrowhawk
ACCIPITER NISUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 610<br>Kidney | | GC/MS | 1 | Not applicable | 390 +or- 50 ppb wet wt<br>(2,800 +or- 170 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 611<br>Liver | | GC/MS | 1 | Not applicable | 650 +or- 50 ppb wet wt<br>(1,950 +or- 160 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 612<br>Muscle | | GC/MS | 1 | Not applicable | 240 +or- 6 ppb wet wt<br>(990 +or- 20 ppb dry wt) | Pectoral muscle<br>East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Trout, lake
SALVELINUS NAMAYCUSH

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 613<br>Liver | | GC-EC | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 2 | a) 1.2-4.2 ppm<br>b) 1.6-4.9 ppm<br>c) 1.9-5.5 ppm<br>d) 4.9-10.2 ppm<br>e) 3.7-7.1 ppm<br>f) 10.8-12.0 ppm<br>Wet wt | a) 2.6 ppm<br>b) 3.0 ppm<br>c) 3.8 ppm<br>d) 7.1 ppm<br>e) 5.9 ppm<br>f) 11.4 ppm<br>Wet wt | a) Age 6 yr<br>b) Age 7 yr<br>c) Age 8 yr<br>d) Age 9 yr<br>e) Age 10 yr<br>f) Age 12 yr<br>Mean wt 3.2 kg, mean length 70.5 cm<br>Collected 10/78<br><br>New York, Lake Cayuga<br><br>NEW YORK; AGE; LIVER; MUSCLES; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS | Wszolek, P.C.<br>Link, D.J.<br>Wachs, T.<br>Youngs, W.D.<br>1979<br>Environmental Science and Technology<br>13(10):1269-1271 |
| 614<br>Muscle | | GC-EC | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 2 | a) 4.1-4.8 ppm<br>b) 4.3-6.1 ppm<br>c) 5.7-7.4 ppm<br>d) 7.5-11.7 ppm<br>e) 9.3-11.6 ppm<br>f) 12.8-13.5 ppm<br>Wet wt | a) 4.4 ppm<br>b) 5.2 ppm<br>c) 6.8 ppm<br>d) 9.3 ppm<br>e) 10.2 ppm<br>f) 13.2 ppm<br>Wet wt | a) Age 6 yr<br>b) Age 7 yr<br>c) Age 8 yr<br>d) Age 9 yr<br>e) Age 10 yr<br>f) Age 12 yr<br>Mean wt 3.2 kg, mean length 70.5 cm<br>Collected 10/78<br><br>New York, Lake Cayuga<br><br>NEW YORK; AGE; LIVER; MUSCLES; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS | Wszolek, P.C.<br>Link, D.J.<br>Wachs, T.<br>Youngs, W.D.<br>1979<br>Environmental Science and Technology<br>13(10):1269-1271 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 615<br>Body | Ingestion | | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6<br>f) 6<br>g) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given | a) 0.48 +or- 0.04 mg/kg<br>b) 0.98 +or- 0.07 mg/kg<br>c) 0.54 +or- 0.01 mg/kg<br>d) 0.52 +or- 0.02 mg/kg<br>e) 4.85 +or- 0.44 mg/kg<br>f) 40.30 +or- 1.92 mg/kg<br>g) 8.05 +or- 0.77 mg/kg | a) Controls<br>b) 500 mg Mirex/kg<br>c) 50 mg Mirex/kg<br>d) 5 mg Mirex/kg<br>e) 5 mg Mirex/kg and 50 mg PCB/kg<br>f) 500 mg PCB/kg<br>g) 50 mg PCB/kg<br>Levels in dry feed for 1 month<br>Carcass<br>Wt 50-110 g<br><br>Significantly lower serum thyroid hormone levels in fish fed 500 mg Mirex or 500 mg PCB/kg dry feed<br><br>BIOACCUMULATION; FISHES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BODY; CANADA | Leatherland, J.F.<br>Sonstegard, R.A.<br>1980<br>Journal of Fish Diseases 3:115-124 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Turnstone, ruddy
ARENARIA INTERPRES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 616<br>Brain | | GC-EC | 3 | 3.0-7.0 ug/g wet wt | 4.5 ug/g wet wt | Found dead, 1974<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Willet
CATOPTROPHORUS SEMIPALMATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 617<br>Brain | | GC-EC | 1 | Not applicable | 0.20 ug/g wet wt | Found dead, 1973<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 618<br>Body | | GC-EC | 2 | 0.8-1.2 ppm wet wt | 0.97 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 619<br>Body | | GC-EC | 17 | 0.5-1.8 ppm wet wt | 0.79 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Boron
7440-42-8
B
AtW 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 620<br>Blood, plasma | Ingestion | Chem | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 2.7 mg/l<br>b) 4.4 mg/l<br>c) 5.3 mg/l<br>d) 8.3 mg/l<br>e) 13.4 mg/l | a) 0 mg/l<br>b) 15 mg/l<br>c) 30 mg/l<br>d) 60 mg/l<br>e) 120 mg/l<br>Added to drinking water for 10 days, alternating with tap water (containing 0.8 mg/l) for 10 days to minimize carry-over effects<br>Mixed beef breeding yearling heifers, initial wt 298 kg, mean wt gain 0.57 kg/day during treatment<br><br>No overt signs of toxicosis<br><br>Decreased plasma phosphate level, increased renal clearance and urinary phosphate excretion<br><br>CATTLE; BIOACCUMULATION; BIOINDICATORS; DRINKING WATER; BORON; NEVADA; BLOOD PLASMA; URINE | Weeth, H.J.<br>Speth, C.F.<br>Hanks, D.R.<br>1981<br>American Journal of Veterinary Research 42(3):474-477 |

(NEXT PAGE)

Boron
7440-42-8
B
AtW 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 621<br>Urine | Ingestion | Chem | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 66.7 mg/hr<br>b) 107.1 mg/hr<br>c) 194.7 mg/hr<br>d) 381.8 mg/hr<br>e) 636.9 mg/hr | a) 0 mg/l<br>b) 15 mg/l<br>c) 30 mg/l<br>d) 60 mg/l<br>e) 120 mg/l<br>Added to drinking water for 10 days, alternating with tap water (containing 0.8 mg/l) for 10 days to minimize carry-over effects<br>Mixed beef breeding yearling heifers, initial wt 298 kg, mean wt gain 0.57 kg/day during treatment<br><br>No overt signs of toxicosis<br><br>Decreased plasma phosphate level, increased renal clearance and urinary phosphate excretion<br><br>CATTLE; BIOACCUMULATION; BIOINDICATORS; DRINKING WATER; BORON; HYDRADA; BLOOD PLASMA; URINE | Weeth, H.J.<br>Speth, C.F.<br>Hanks, D.R.<br>1981<br>American Journal of Veterinary Research 42(3):474-477 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 622<br>Kidney | | AAS | 4 | 0.79-8.20 ppm wet wt | 1.82 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 623<br>Liver | | AAS | 1 | a) 0.31-0.32 ug/g<br>b) Not applicable<br>Wet wt | a) 0.30 +or- 0.03 ug/g<br>b) 0.26 +or- 0.01 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significantly higher levels in large lobe<br>Gravid fish, wt 25 lb, length 34 in<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 624<br>Muscle | | AAS | 1 | 0.010-0.063 ug/g wet wt | 0.03 +or- 0.02 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lbs, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Bullhead, black
ICTALURUS MELAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 625<br>Muscle | | AAS | 10 | 0.04-0.30 mg/kg wet wt | 0.15 +or- 0.05 mg/kg wet wt | Collected 1974<br>1.0-24.5 ug/l reservoir water,<br>0.18-1.24 mg/kg sediment<br>No correlation between fish size and Cd level<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 626<br>Blood | | AAS | 91 | <0.005-0.030 ppm wet wt | 0.005 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 627<br>Kidney | | AAS | 92 | 0.075-2.500 ppm wet wt | 0.565 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 628<br>Liver | | AAS | 88 | 0.034-0.430 ppm wet wt | 0.105 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 629<br>Muscle | | AAS | 86 | <0.005-0.034 ppm wet wt | 0.006 ppm wet wt<br>Median | Longissimus dorsi<br>Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plant<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 630<br>Hair | | AAS | 10 | 0.55-0.65 ug/g wet wt | 0.60 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (W)<br><br>BARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Coyote
CANIS LATRANS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 631<br>Kidney | | AAS | 10 | 0.61-0.91 ug/g wet wt | 0.76 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit<br>(Crandon)<br><br>Wisconsin (N)<br><br>BABES; COYOTES; VOLES; DEER MICE;<br>SHREWS; OTTERS; JUVENILES; WISCONSIN;<br>ADULTS; BODY; HAIR; KIDNEYS; LIVER;<br>ARSENIC; CADMIUM; COPPER; LEAD;<br>MERCURY; METALS; NICKEL; ZINC;<br>BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Hongstad, O.J.<br>1981<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 27:28-33 |
| 632<br>Liver | | AAS | 10 | 0.34-0.44 ug/g wet wt | 0.39 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit<br>(Crandon)<br><br>Wisconsin (N)<br><br>BABES; COYOTES; VOLES; DEER MICE;<br>SHREWS; OTTERS; JUVENILES; WISCONSIN;<br>ADULTS; BODY; HAIR; KIDNEYS; LIVER;<br>ARSENIC; CADMIUM; COPPER; LEAD;<br>MERCURY; METALS; NICKEL; ZINC;<br>BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Hongstad, O.J.<br>1981<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Crappie, black
POMOXIS NIGROMACULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 633<br>Muscle | | AAS | 16 | 0.03-0.45 ug/kg wet wt | 0.19 +or- 0.03 ug/kg wet wt | Collected 1978<br>1.0-24.5 ug/l reservoir water,<br>0.10-1.24 ug/kg sediment<br>No correlation between fish size and Cd level<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES;<br>COMPARATIVE EVALUATIONS; CADMIUM;<br>MERCURY; BIOACCUMULATION; FISHES;<br>WATER POLLUTION | Kent, J.C.<br>Johnson, E.W.<br>1979<br>Pesticides Monitoring<br>Journal 13(1):35-40 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 634<br>Kidney | | AAS | 10 | 0.52-7.30 ppm wet wt | 1.94 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Egret, cattle
BUBULCUS IBIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 635<br>Bone | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.008-0.019 ug/g<br>b) 0.015-0.055 ug/g<br>c) 0.014-0.028 ug/g<br>Wet wt | a) 0.016 +or- 0.003 ug/g<br>b) 0.028 +or- 0.009 ug/g<br>c) 0.022 +or- 0.004 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 636<br>Brain | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.003-0.020 ug/g<br>b) 0.004-0.043 ug/g<br>c) 0.005-0.036 ug/g<br>Wet wt | a) 0.012 +or- 0.004 ug/g<br>b) 0.021 +or- 0.008 ug/g<br>c) 0.016 +or- 0.007 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 637<br>Eggs | | AAS | 10 | a) <0.001-0.008 ug/g<br>b) Not detected | a) 0.002 +or- 0.001 ug/g<br>b) Not applicable | a) Shells<br>b) Contents<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Target, cattle
BIOLOGICAL DATA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 638<br>Heart | | AAS | a) 4<br>b) 4<br>c) 4 | a) <0.001-0.037 ug/g<br>b) 0.010-0.044 ug/g<br>c) 0.014-0.025 ug/g<br>Wet wt | a) 0.017 +or- 0.008 ug/g<br>b) 0.024 +or- 0.007 ug/g<br>c) 0.025 +or- 0.004 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 639<br>Kidney | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.033-0.054 ug/g<br>b) 0.022-0.057 ug/g<br>c) 0.493-1.569 ug/g<br>Wet wt | a) 0.037 +or- 0.006 ug/g<br>b) 0.039 +or- 0.008 ug/g<br>c) 1.271 +or- 0.2e0 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 640<br>Liver | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.008-0.040 ug/g<br>b) 0.018-0.023 ug/g<br>c) 0.045-0.159 ug/g<br>Wet wt | a) 0.017 +or- 0.08 ug/g<br>b) 0.021 +or- 0.001 ug/g<br>c) 0.111 +or- 0.024 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 641<br>Muscle | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.006-0.055 ug/g<br>b) 0.008-0.031 ug/g<br>c) 0.010-0.035 ug/g<br>Wet wt | a) 0.025 +or- 0.011 ug/g<br>b) 0.016 +or- 0.005 ug/g<br>c) 0.018 +or- 0.006 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 243.3 g<br>c) Adults, mean wt 378.8 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 642<br>Body | | AAS | 2 | Not given | 0.20 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Heron, Louisiana
HYDRANASSA TRICOLOR

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 683<br>Bone | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.003-0.040 ug/g<br>b) 0.001-0.059 ug/g<br>c) 0.011-0.044 ug/g<br>Wet wt | a) 0.018 +or- 0.003 ug/g<br>b) 0.033 +or- 0.008 ug/g<br>c) 0.027 +or- 0.004 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (N), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 684<br>Brain | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.002-0.059 ug/g<br>b) 0.008-0.039 ug/g<br>c) 0.008-0.046 ug/g<br>Wet wt | a) 0.018 +or- 0.005 ug/g<br>b) 0.024 +or- 0.004 ug/g<br>c) 0.019 +or- 0.004 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (N), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 685<br>Eggs | | AAS | 10 | a) <0.001-0.008 ug/g<br>b) 0.001-0.009 ug/g | a) 0.003 +or- 0.001 ug/g<br>b) 0.004 +or- 0.001 ug/g | a) Shells<br>b) Contents<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (N), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Heron, Louisiana
HYDRANASSA TRICOLOR

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 646<br>Heart | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.004-0.025 ug/g<br>b) 0.007-0.024 ug/g<br>c) 0.009-0.038 ug/g<br>Wet wt | a) 0.015 +or- 0.002 ug/g<br>b) 0.016 +or- 0.002 ug/g<br>c) 0.019 +or- 0.004 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 647<br>Kidney | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.003-0.046 ug/g<br>b) 0.012-0.052 ug/g<br>c) 0.240-1.620 ug/g<br>Wet wt | a) 0.022 +or- 0.003 ug/g<br>b) 0.032 +or- 0.005 ug/g<br>c) 0.823 +or- 0.164 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age ($P<0.001$)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 648<br>Liver | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.010-0.041 ug/g<br>b) 0.018-0.038 ug/g<br>c) 0.041-0.125 ug/g<br>Wet wt | a) 0.024 +or- 0.003 ug/g<br>b) 0.031 +or- 0.002 ug/g<br>c) 0.078 +or- 0.010 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 649<br>Muscle | | AAS | a) 12<br>b) 8<br>c) 9 | a) <0.001-0.041 ug/g<br>b) 0.003-0.029 ug/g<br>c) 0.009-0.032 ug/g<br>Wet wt | a) 0.016 +or- 0.003 ug/g<br>b) 0.016 +or- 0.004 ug/g<br>c) 0.019 +or- 0.003 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
House, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 650<br>Body | | AAS | 30 | a) Not given<br>b) Not given | a) < 0.1 ug/g<br>b) < 0.1 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 5 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Mussel, common
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 651<br>Muscle | | AAS | a) 20<br>b) 20<br>c) 20<br>d) 20<br>e) 20<br>f) 20<br>g) 20<br>q) 20<br>i) 20<br>j) 20<br>k) 20<br>l) 20<br>m) 20<br>n) 20<br>o) 20<br>p) 20<br>q) 20<br>r) 20<br>s) 20 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given<br>m) Not given<br>n) Not given<br>o) Not given<br>p) Not given<br>q) Not given<br>r) Not given<br>s) Not given | a) 7.6 +or- 2.50 ug/g<br>b) 2.4 +or- 0.25 ug/g<br>c) 2.3 +or- 0.62 ug/g<br>d) 5.0 +or- 1.50 ug/g<br>e) 0.9 +or- 0.15 ug/g<br>f) 0.9 +or- 0.19 ug/g<br>g) 0.7 +or- 0.13 ug/g<br>h) 0.6 +or- 0.10 ug/g<br>i) 1.2 +or- 0.40 ug/g<br>j) 3.3 +or- 0.80 ug/g<br>k) 2.1 +or- 0.44 ug/g<br>l) 5.0 +or- 1.12 ug/g<br>m) 0.8 +or- 0.32 ug/g<br>n) 1.1 +or- 0.35 ug/g<br>o) 2.0 +or- 0.70 ug/g<br>p) 1.0 +or- 0.31 ug/g<br>q) 1.5 +or- 0.63 ug/g<br>r) 3.3 +or- 1.06 ug/g<br>s) 0.9 +or- 0.15 ug/g<br>Dry wt | a) Saxgehuk<br>b) Falsterbo Kanal<br>b) Barseback<br>d) Sartorp<br>e) Fortuna<br>f) Viken<br>g) Kullen<br>h) Ripagarden<br>i) Neverdalsstrand<br>j) Hojerup<br>k) Nomeda<br>l) Dragor<br>m) Kobenhaven<br>n) Taarback<br>o) Riverod<br>p) Helsingor<br>q) Gilleleje<br>r) Salthola<br>s) Ven<br>Whole soft parts, composite samples<br>General decrease from south to north, more pronounced on Swedish than on Danish coast. Collected 6/1977<br>Values also for algae at some locations<br><br>Sweden/Denmark, Baltic Sea, Oresund<br><br>MOLLUSKS; BIOACCUMULATION; WATER POLLUTION; CADMIUM; IRON; LEAD; ZINC; BODY; SWEDEN | Phillips, D.J.<br>1979<br>Environmental Pollution 18:31-43 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 652<br>Body | | AAS | | Not given | 1.2 +or- 0.1 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 653<br>Gills | | AAS | | Not given | 0.05 +or- 0.01 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 654<br>Gonads | | AAS | | a) Not given<br>b) Not given | a) 0.1 +or- 0.04 ug/g<br>b) 0.02 +or- 0.01 ug/g<br>Dry wt | a) Male<br>b) Female<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 655<br>Heart | | AAS | | Not given | 0.3 +or- 0.1 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 656<br>Hepatopan creas | | AAS | | Not given | 50 +or- 10 ug/g dry wt | 98% of whole animal content<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 657<br>Intestine | | AAS | | Not given | 0.12 +or- 0.01 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 658<br>Kidney | | AAS | | Not given | 1.5 +or- 0.1 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 659<br>Muscle | | AAS | | Not given | 0.08 +or- 0.04 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 660<br>Skin | | AAS | | Not given | 0.04 +or- 0.01 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 661<br>Body | | AAS | 5 | Not given | 0.98 ug/g wet wt | Composite sample<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SERVUS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 662<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 3.5 +or- 0.75 ug/g<br>b) 4.1 +or- 0.57 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 663<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 3.8 +or- 0.30 ug/g<br>b) 4.9 +or- 1.40 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 664<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 3.4 +or- 0.14 ug/g<br>b) 5.6 +or- 0.70 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 665<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 5.1 +or- 0.18 ug/g<br>b) 4.5 +or- 0.80 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 666<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 1.6 +or- 0.52 ug/g<br>b) 2.6 +or- 0.72 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Adductor muscle<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Perch, yellow
PERCA FLAVESCENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 667<br>Muscle | | AAS | 9 | 0.14-0.44 mg/kg wet wt | 0.23 +or- 0.03 mg/kg wet wt | Collected 1974<br>1.0-24.5 ug/l reservoir water,<br>0.14-1.24 mg/kg sediment<br>No correlation between fish size and Cd level<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Salmon

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 668<br>Body | | AAS | | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 0.8 ug/g<br>b) 2.0 ug/g<br>c) 0.7 ug/g<br>d) 1.5 ug/g<br>Dry wt | a) Vesturdalsa River, heavily affected by volcanic activity<br>b) Laxa i Adaldal River, affected by volcanic and geothermal activity<br>c) Nordura River, outside volcanic area<br>d) Selflot River, far outside volcanic area<br>Fries, age 2-4 yr, electrofished 1975-78<br><br>Iceland<br><br>BODY; CADMIUM; MERCURY; SELENIUM; ZINC; BIOACCUMULATION; ICELAND; JUVENILES; VOLCANOES; FISHES | Johannesson, T.<br>Lunde, G.<br>Steinnes, E.<br>1981<br>Acta Pharmacologica et Toxicologica 48:185-189 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 669<br>Kidney | | AAS | 15 | 0.33-7.90 ppm wet wt | 1.38 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DIE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 670<br>Kidney | | AAS | 16 | 0.83-22.7 ppm wet wt | 4.31 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DIE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 671<br>Kidney | | AAS | 15 | 0.66-12.0 ppm wet wt | 27.4 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; ELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, P.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 672<br>Adrenal gland | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 0.02-0.03 ppm<br>b) 0.02-0.04 ppm<br>Dry wt | a) 0.03 ppm<br>b) 0.03 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Maschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 673<br>Blood | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 0.01-0.01 ppm<br>b) 0.01-0.01 ppm<br>Dry wt | a) 0.01 ppm<br>b) 0.01 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Maschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

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Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 674<br>Bone | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 0.03-0.04 ppm<br>b) 0.03-0.04 ppm<br>Dry wt | a) 0.04 ppm<br>b) 0.04 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.M.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 675<br>Brain | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 0.01-0.01 ppm<br>b) 0.01-0.01 ppm<br>Dry wt | a) 0.01 ppm<br>b) 0.01 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.M.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 676<br>Heart | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 0.01-0.02 ppm<br>b) 0.01-0.01 ppm<br>Dry wt | a) 0.02 ppm<br>b) 0.01 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.M.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
At# 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
CVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 677<br>Kidney | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.1-0.2 ppm<br>b) 0.2-0.3 ppm<br>Dry wt | a) 0.2 ppm<br>b) 0.3 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 678<br>Liver | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.02-0.06 ppm<br>b) 0.04-0.11 ppm<br>Dry wt | a) 0.04 ppm<br>b) 0.08 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 679<br>Pancreas | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.02-0.03 ppm<br>b) 0.04-0.08 ppm<br>Dry wt | a) 0.03 ppm<br>b) 0.06 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
AtW 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
CVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 680<br>Spleen | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.01-0.01 ppm<br>b) 0.03-0.05 ppm<br>Dry wt | a) 0.01 ppm<br>b) 0.04 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschak, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 681<br>Testis | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.01-0.01 ppm<br>b) 0.02-0.04 ppm<br>Dry wt | a) 0.01 ppm<br>b) 0.03 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschak, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 682<br>Thyroid gland | Ingestion | AAA<br>ASV | a) 2<br>b) 2 | a) 0.03-0.03 ppm<br>b) 0.05-0.05 ppm<br>Dry wt | a) 0.03 ppm<br>b) 0.05 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschak, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Shrew
SOREX CINEREUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 683<br>Body | | AAS | 45 | a) Not given<br>b) Not given | a) 0.22 ug/g<br>b) 0.2 +or- 0.1 ug/g<br>Wet wt | a) Ladysmith, 2 samples<br>b) Crandon, 7 samples<br>5 animal/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (W)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 684<br>Body | | AAS | 15 | a) Not given<br>b) Not given | a) 0.32 ug/g<br>b) 0.28 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 2 samples<br>3 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (W)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Shrimp
PANDALUS MONTAGUI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 685<br>Body | | AAS | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.35 +or- 0.06 ug/g<br>b) 8.2 +or- 0.63 ug/g<br>c) 5.9 +or- 0.49 ug/g<br>d) 7.8 +or- 0.44 ug/g<br>e) 6.1 +or- 0.30 ug/g<br>Dry wt | a) Controls<br>b) 37 ug Cd/l<br>c) 40 ug Cd/l and 70 ug Zn/l<br>d) 35 ug Cd/l and 105 ug Zn/l<br>e) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Carcass<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CROSTACEANS; CANADA, ICDY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Pezzack, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |

(NEXT PAGE)

Cadmium
7440-43-9
Cd
Atm 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Shrimp
PANDALUS MONTAGUI

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 686<br>Body | | AAS | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.47 +or- 0.09 ug/g<br>b) 6.1 +or- 0.37 ug/g<br>c) 5.1 +or- 0.25 ug/g<br>d) 6.0 +or- 0.39 ug/g<br>e) 5.3 +or- 0.26 ug/g<br>Dry wt | a) Controls<br>b) 37 ug Cd/l<br>c) 40 ug Cd/l and 70 ug Zn/l<br>d) 35 ug Cd/l and 105 ug Zn/l<br>e) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>External eggs removed<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Walwood, B.A.<br>Perrak, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 687<br>Eggs | | AAS | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.12 +or- 0.06 ug/g<br>b) 4.3 +or- 0.42 ug/g<br>c) 3.4 +or- 0.70 ug/g<br>d) 3.5 +or- 0.27 ug/g<br>e) 2.2 +or- 0.27 ug/g<br>Dry wt | a) Controls<br>b) 37 ug Cd/l<br>c) 40 ug Cd/l and 70 ug ug Zn/l<br>d) 35 ug Cd/l and 105 ug Zn/l<br>e) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Walwood, B.A.<br>Perrak, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 688<br>Hepatopan creas | | AAS | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 6.36 +or- 2.32 ug/g<br>b) 25.6 +or- 2.13 ug/g<br>c) 50.3 +or- 5.55 ug/g<br>d) 35.8 +or- 8.59 ug/g<br>e) 36.8 +or- 6.46 ug/g<br>Dry wt | a) Controls<br>b) 37 ug Cd/l<br>c) 40 ug Cd/l and 70 ug Zn/l<br>d) 35 ug Cd/l and 105 ug Zn/l<br>e) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Walwood, B.A.<br>Perrak, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 689<br>Muscle | | AAS | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.03 +or- 0.01 ug/g<br>b) 0.8 +or- 0.04 ug/g<br>c) 0.7 +or- 0.03 ug/g<br>d) 0.8 +or- 0.10 ug/g<br>e) 0.9 +or- 0.09 ug/g<br>Dry wt | a) Controls<br>b) 37 ug Cd/l<br>c) 40 ug Cd/l and 70 ug Zn/l<br>d) 35 ug Cd/l and 105 ug Zn/l<br>e) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Tail muscle<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Walwood, B.A.<br>Perrak, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sucker, Utah
CATOSTOMUS ARDENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 690<br>Muscle | | AAS | 16 | 0.08-0.60 ug/kg wet wt | 0.19 +or- 0.04 ug/kg wet wt | Collected 1974<br>1.0-24.5 ug/l reservoir water,<br>0.14-1.24 ug/kg sediment<br>No correlation between fish size and Cd level<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 691<br>Blood | | AAS | 90 | <0.005-0.012 ppm wet wt | 0.005 ppm wet wt<br>Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, E.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 692<br>Kidney | | AAS | 93 | 0.037-2.470 ppm wet wt | 0.184 ppm wet wt<br>Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, E.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 693<br>Liver | | AAS | 95 | 0.015-0.470 ppm wet wt | 0.051 ppm wet wt<br>Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, E.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 694<br>Muscle | | AAS | 87 | <0.005-0.065 ppm wet wt | 0.014 ppm wet wt<br>Median | Longissimus dorsi<br>Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, E.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Term, sooty
SIERRA FUSCATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 695<br>Brain | | NA<br>ASV | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 3.09 +or- 0.06 ppm<br>b) 0.16 +or- 0.04 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA OAHUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 696<br>Eggs | | NA<br>ASV | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 2.25 +or- 0.09 ppm<br>b) 75.04 +or- 10.75 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA OAHUENSIS. Significantly higher levels (P < 0.01)<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 697<br>Feathers | | NA<br>ASV | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 4.25 +or- 0.38 ppm<br>b) 0.02 +or- 0.01 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA CAHUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 698<br>Kidney | | NA<br>ASV | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 23.50 +or- 1.09 ppm<br>b) 16.65 +or- 1.79 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA OAHUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 699<br>Liver | | NA<br>ASV | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 3.79 +or- 0.26 ppm<br>b) 2.03 +or- 0.19 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA OAHUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 700<br>Muscle | | AAS | 12 | 0.32-0.80 mg/kg wet wt | 0.51 +or- 0.04 mg/kg wet wt | Collected 1974, length > 20 cm<br>1.0-24.5 ug/l reservoir water,<br>0.14-1.24 mg/kg sediment<br>No correlation between fish size and Cd level<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Vole, meadow
MICROTUS PENNSYLVANICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 701<br>Body | | AAS | 40 | a) Not given<br>b) Not given | a) < 0.1 ug/g<br>b) < 0.1 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 702<br>Body | | AAS | 35 | a) Not given<br>b) Not given | a) < 0.1 ug/g<br>b) 0.2 ug/g<br>Wet wt | a) Ladysmith, 5 samples<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 703<br>Kidney | | AAS | 2 | 1.20-1.80 ppm wet wt | 1.47 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 704<br>Kidney | | AAS | 13 | 0.44-2.60 ppm wet wt | 1.33 ppm wet wt<br>geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 705<br>Body | | GC-EC | 4 | 0.7-1.4 ppm wet wt | 0.96 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 706 Muscle | | GC-EC | 8 | Not given | 8 ng/g | Maximum value Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 707 Muscle | | GC-EC | 13 | Not given | 5 ng/g Median | 24 ng/g maximum value Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Carp
CYPRINUS CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 708 Muscle | | GC-EC | 7 | Not given | 6 ng/g | Maximum value Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 709<br>Muscle | | GC-EC | 11 | Not given | 1 ng/g<br>Median | 14 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Catfish, flathead
PYLODICTOS OLIVARUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 710<br>Muscle | | GC-EC | 1 | Not applicable | 5 ng/g | Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-C18
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Cod
GADUS MORHUA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 711<br>Liver | | | a) 15<br>b) 21<br>c) 17 | a) Not given<br>b) Not given<br>c) Not given | a) 0.02 mg/kg<br>b) 0.05 mg/kg<br>c) 0.02 mg/kg | a) Kotka, Gulf of Bothnia<br>b) Hanko, Gulf of Finland<br>c) Pori, Gulf of Finland<br>2 yr olds, length 25-35 cm, collected as by-catch of herring-trawl<br><br>Baltic Sea (N), Finnish coast<br><br>BIOACCUMULATION; FISHES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; LIVER; FINLAND | Wickstrom, K.<br>Pyysalo, H.<br>Perttila, M.<br>1981<br>Chemosphere 10(9):999-1004 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 712<br>Body | | GC-EC | 13 | Not applicable | 0.12 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 713<br>Body | | GC-EC | 15 | 0.2-1.7 ppm wet wt | 0.66 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Sandpiper, least
CALIDRIS POSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 718<br>Body | | GC-EC | 30 | 0.1-0.7 ppm wet wt | 0.16 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 715<br>Body | | GC-EC | 22 | 0.1-0.4 ppm wet wt | 0.20 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 716<br>Muscle | | GC-EC | 16 | Not given | 2 ng/g<br>Median | 17 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Chlordane
12789-03-6
C10-H6-Cl8
MW 409.8, BP 175 C at 2 mm Hg, VP 1X10(E-5) mm Hg at 25 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 717<br>Body | | GC-EC | 17 | 0.1-0.2 ppm wet wt | 0.13 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Chloroform (8 CI)
Methane, trichloro- (9 CI)
67-66-3
C-H-Cl3
MW 119.39, MP -63.5 C, VP 100 mm Hg at 10.6 C
Chicken

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 718<br>Adipose | Immersion | GC/MS | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3 | a) 10-30 ug/kg<br>b) <8-20 ug/kg<br>c) 53-1291 ug/kg<br>d) 56-295 ug/kg<br>e) <10-26 ug/kg<br>f) 90-249 ug/kg<br>g) 26-82 ug/kg | a) 20 ug/kg<br>b) 14 ug/kg<br>c) 447 ug/kg<br>d) 146 ug/kg<br>e) 14 ug/kg<br>f) 159 ug/kg<br>g) 46 ug/kg | a) 5 mg ClO2/l for 5 min at 15-16 C<br>b) 5 mg ClO2/l for 20 min at 1.5-2.0 C<br>c) 50 mg Cl2/l for 5 min at 15-16 C<br>d) 50 mg Cl2/l for 20 min at 1.5-2.5 C<br>e) 5 mg Cl2/l for 20 min 1.5 C<br>g) 20 mg Cl2/l at 13 C<br>h) Combined Cl2 (at 50 mg/l level) treatments and cooking at 195 C for 44 min/kg + 20 min<br>a)-e) Immersed in 2.5 l water/carcass, g) sprayed with 1.5 l water/carcass<br>Broiler chickens, age 8-11 wk, eviscerated wt 0.96-2.48 kg<br><br>CHICKENS; ADIPOSE TISSUE; MUSCLES; SKIN; BIOACCUMULATION | Robinson, D.<br>Mead, G.C.<br>Barnes, M.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:145-150 |
| 719<br>Muscle | Immersion | GC/MS | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3 | a) <2-6 ug/kg<br>b) Not given<br>c) 90-374 ug/kg<br>d) 13-25 ug/kg<br>e) <2-4 ug/kg<br>f) 10-14 ug/kg<br>g) 61-71 ug/kg | a) 2 ug/kg<br>b) <2 ug/kg<br>c) 177 ug/kg<br>d) 17 ug/kg<br>e) 3 ug/kg<br>f) 12 ug/kg<br>g) 64 ug/kg | a) 5 mg ClO2/l for 5 min at 15-16 C<br>b) 5 mg ClO2/l for 20 min at 1.5-2.0 C<br>c) 50 mg Cl2/l for 5 min at 15-16 C<br>d) 50 mg Cl2/l for 20 min at 1.5-2.5 C<br>e) 5 mg Cl2/l for 20 min 1.5 C<br>g) 20 mg Cl2/l at 13 C<br>h) Combined Cl2 (at 50 mg/l level) treatments and cooking at 195 C for 44 min/kg + 20 min<br>a)-e) Immersed in 2.5 l water/carcass, g) sprayed with 1.5 l water/carcass<br>Broiler chickens, age 8-11 wk, eviscerated wt 0.96-2.48 kg<br><br>CHICKENS; ADIPOSE TISSUE; MUSCLES; SKIN; BIOACCUMULATION | Robinson, D.<br>Mead, G.C.<br>Barnes, M.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:145-150 |
| 720<br>Skin | Immersion | GC/MS | a) 5<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3 | a) 3-7 ug/kg<br>b) 12-25 ug/kg<br>c) 5-8 ug/kg<br>d) 102-192 ug/kg<br>e) 17-22 ug/kg<br>f) <1-6 ug/kg<br>g) 47-82 ug/kg<br>h) 113-144 ug/kg | a) 5 ug/kg<br>b) 19 ug/kg<br>c) 6 ug/kg<br>d) 144 ug/kg<br>e) 20 ug/kg<br>f) 3 ug/kg<br>g) 68 ug/kg<br>h) 130 ug/kg | a) Controls<br>b) 5 mg ClO2/l for 5 min at 15-16 C<br>c) 5 mg ClO2/l for 20 min at 1.5-2.0 C<br>d) 50 mg Cl2/l for 5 min at 15-16 C<br>e) 50 mg Cl2/l for 20 min at 1.5-2.5 C<br>f) 5 mg Cl2/l for 20 min at 1.5 C<br>g) 20 mg Cl2/l at 13 C<br>h) Combined Cl2 treatments (at 50 mg/l level) and cooking at 195 C for 44 min/kg + 20 min<br>b)-f) Immersed in 2.5 l water/carcass, g) sprayed with 1.5 l water/carcass<br>Broiler chickens, age 8-11 wk, eviscerated wt 0.96-2.48 kg<br><br>CHICKENS; ADIPOSE TISSUE; MUSCLES; SKIN; BIOACCUMULATION | Robinson, D.<br>Mead, G.C.<br>Barnes, M.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:145-150 |

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Barn, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 721<br>Liver | | AAS | 1 | a) 2.6-9.8 ug/g<br>b) Not applicable<br>Wet wt | a) 6 +or- 4 ug/g<br>b) 2.6 +or- 0.1 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 722<br>Muscle | | AAS | 1 | 2.7-9.5 ug/g wet wt | 5 +or- 3 ug/g wet wt | Dorsal white muscle, 5 samples<br>High value assumed from contamination by stainless steel dissection blade<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 723<br>Blood | Ingestion | AAS | a) 11<br>b) 1 | a) 0.006-0.066 ppm<br>b) Not applicable<br>Wet wt | a) 0.022 ppm<br>b) 1.08 ppm<br>Wet wt | a) Cattle not exposed<br>b) Found dead near oil well drilling site<br><br>Oklahoma<br><br>CATTLE; OIL WELLS; BIOACCUMULATION; CHROMIUM; BLOOD; KIDNEYS; OKLAHOMA | Kerr, L.A.<br>Edwards, W.C.<br>1981<br>Veterinary and Human Toxicology<br>23(6):401-402 |
| 724<br>Kidney | Ingestion | AAS | a) 10<br>b) 1 | a) 0.50-6.20 ppm<br>b) Not applicable<br>Wet wt | a) 2.97 ppm<br>b) 15.8 ppm<br>Wet wt | a) Cattle not exposed<br>b) Heifer found dead near recently completed oil well<br><br>Oklahoma<br><br>Severe inflammation of abomasum, extreme hepatic congestion, engorgement of hepatic sinusoids with erythrocytes and disassociation of hepatic cords<br><br>CATTLE; OIL WELLS; BIOACCUMULATION; CHROMIUM; BLOOD; KIDNEYS; OKLAHOMA | Kerr, L.A.<br>Edwards, W.C.<br>1981<br>Veterinary and Human Toxicology<br>23(6):401-402 |

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 725<br>Eggs | | AAS | 20 | Not given | 0.64 +or- 0.07 ppm | Collected 1978<br>Shell thickness 0.347 mm, identical to pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDE; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Hameltine, S.D.<br>Mulhern, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |
| 726<br>Intestine | Intestinal perfusion | AAS | a) 9<br>b) 7<br>c) 7<br>d) 8<br>e) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 1.516 +or- 0.421 umol/20 min<br>b) 1.482 +or- 0.272 umol/20 min<br>c) 0.979 +or- 0.552 umol/20 min<br>d) 1.021 +or- 0.439 umol/20 min<br>e) 0.772 +or- 0.289 umol/20 min<br>g dry wt | a) KCr(SO4)12 H20 (anionic)<br>b) CrO3 (anionic)<br>c) Cr pellets (cationic)<br>d) Cr (C6H7O2)3 (cationic)<br>e) Cr(NO3)3.9H20 (cationic)<br>In vivo absorption by perfused segment of the small intestine after 10 ppm Cr<br>Ducklings, mean wt 188.5 g, age 11-17 days<br><br>DUCKS; JUVENILES; BIOACCUMULATION; WATER POLLUTION; CHROMIUM; INTESTINES; MARYLAND | Eastin, W.C., Jr.<br>Hameltine, S.D.<br>Murray, H.C.<br>1980<br>Toxicology Letters 6:193-197 |

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 727<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 113 +or- 6 ug/g<br>b) 93 +or- 10 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 728<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 170 +or- 5 ug/g<br>b) 40 +or- 3 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

(NEXT PAGE)

Chromium
7440-47-3
Cr
At# 51.996, BP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 729<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 106 +or- 6 ug/g<br>b) 42 +or- 35 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 730<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 188 +or- 74 ug/g<br>b) 47 +or- 8 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 731<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 111 +or- 13 ug/g<br>b) 35 +or- 21 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Adductor muscle<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

Cobalt
7440-48-4
Co
Atw 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 732<br>Liver | | AAS | a) 6<br>b) 12<br>c) 11 | a) Not given<br>b) Not given<br>c) Not given | a) > 0.06 ug/g<br>b) > 0.06 ug/g<br>c) > 0.06 ug/g<br>Dry wt | a) Age < 4 mo<br>b) Age 4-24 mo<br>c) Age > 24 mo<br>Samples submitted for routine disease diagnosis<br>Collected 6/76-12/79<br><br>Australia, Victoria (W)<br><br>CATTLE; SHEEP; JUVENILES; AUSTRALIA; ADULTS; LIVER; BIOACCUMULATION; SOILS; COBALT | Rentsch, A.D.<br>1980<br>Australian Veterinary Journal 56:458-459 |

Cobalt
7440-48-4
Co
Atw 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 733<br>Liver | | AAS | a) 39<br>b) 12<br>c) 4 | a) Not given<br>b) Not given<br>c) Not given | a) < 0.06 ug/g<br>b) < 0.06 ug/g<br>c) 0.06 ug/g<br>Dry wt | a) Age < 4 mo (total of 112 animals)<br>b) Age 4-24 mo (total of 228 animals)<br>c) Age > 24 mo (total of 110 animals)<br>lowest levels mainly in coastal area west of Portland and 100 km inland from Cavendish, and between August and December of each year. Collected 6/76-12/79<br>Samples submitted for routine disease diagnosis<br><br>Australia, Victoria (W)<br><br>CATTLE; SHEEP; JUVENILES; AUSTRALIA; ADULTS; LIVER; BIOACCUMULATION; SOILS; COBALT | Rentsch, A.D.<br>1980<br>Australian Veterinary Journal 56:458-459 |

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 734<br>Liver | | AAS | 1 | a) 1.6-2.5 ug/g<br>b) Not applicable<br>Wet wt | a) 2.1 +or- 0.6 ug/g<br>b) 2.3 +or- 0.1 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fish, wt 25 lb, length 38 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Reit, K.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 735<br>Muscle | | AAS | 1 | 0.21-0.58 ug/g wet wt | 0.35 +or- 0.15 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Reit, R.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 736<br>Blood, serum | Ingestion | Colorimetry | 364 | a) 0.1-0.4 mg/l<br>b) 0.5-1.9 mg/l<br>c) 0.2-4.0 mg/l | a) Not given<br>b) Not given<br>c) Not given | a) 90 samples (24.7%)<br>b) 244 samples (67.3%)<br>c) 30 samples (8%)<br>Significantly higher incidence of low Cu levels in rainy season (P=0.01)<br>Samples from 62 herds of adult cattle<br><br>El Salvador<br><br>CATTLE; BIOACCUMULATION; COPPER; BLOOD SERUM; EL SALVADOR; ADULTS | Edwards, S.<br>Ramirez, L.<br>1981<br>Tropical Animal Health and Production 13:242-243 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 737<br>Hair | | AAS | 10 | 14-16 ug/g wet wt | 15 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>RABIES; COYOTES; VOLES; DEER MICE; SKUNKS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Coyote
CANIS LATRANS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 738<br>Kidney | | AAS | 10 | 5.9-6.3 ug/g wet wt | 6.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (W)<br><br>MAMMS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 739<br>Liver | | AAS | 10 | 20-21 ug/g wet wt | 21 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (W)<br><br>MAMMS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 740<br>Eggs | | AAS | 20 | Not given | 1.68 +or- 0.10 ppm | Collected 1978<br>Shell thickness 0.347 mm, identical to pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDT; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Haseltine, S.D.<br>Hulhern, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |

Copper
7440-50-8
Cu
At# 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 781<br>Body | | AAS | 2 | Not given | 4.2 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
At# 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 782<br>Body | | AAS | 30 | a) Not given<br>b) Not given | a) 3.9 ug/g<br>b) 3.9 +or- 0.6 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 5 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
At# 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 783<br>Body | | AAS | | Not given | 260 +or- 70 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Nimmand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Copper
7440-50-8
Cu
Atm 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 744<br>Gills | | AAS | | Not given | 300 +or- 40 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 54 cephalopods, average wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 745<br>Gonads | | AAS | | a) Not given<br>b) Not given | a) 50 +or- 8 ug/g<br>b) 60 +or- 6 ug/g<br>Dry wt | a) Male<br>b) Female<br>Pooled tissues of 54 cehpalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 746<br>Heart | | AAS | | Not given | 500 +or- 40 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 747<br>Hepatopan creas | | AAS | | Not given | 2500 +or- 700 ug/g dry wt | 78% of whole animal content<br>Pooled tissues of cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 748<br>Intestine | | AAS | | Not given | 90 +or- 10 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 749<br>Kidney | | AAS | | Not given | 340 +or- 60 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 750<br>Muscle | | AAS | | Not given | 26 +or- 2 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 751<br>Skin | | AAS | | Not given | 50 +or- 4 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 752<br>Body | | AAS | 5 | Not given | 12 ug/g wet wt | Composite sample<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 753<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 744 +or- 56 ug/g<br>b) 192 +or- 106 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 754<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 2296 +or- 73 ug/g<br>b) 552 +or- 393 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 755<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 624 +or- 129 ug/g<br>b) 548 +or- 89 ug/b<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 756<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 1365 +or- 38 ug/g<br>b) 747 +or- 38 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |

(NEXT PAGE)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 757<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 430 +or- 33 ug/g<br>b) 346 +or- 28 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Addector muscle<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; HANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.S.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 758<br>Blood, plasma | Ingestion | AAS | a) 10<br>b) 12<br>c) 5 | a) Not given<br>b) Not given<br>c) Not given | a) 0.98 +or- 0.09 mg/l<br>b) 1.20 +or- 0.09 mg/l<br>c) 0.54 +or- 0.13 mg/l | a) 30 mg Zn/kg (feed intake 2.1 kg/sheep/day<br>b) 150 mg Zn/kg (feed intake 2.0 kg/sheep/day)<br>c) 750 mg Zn/kg (feed intake 1.6 kg/sheep/day)<br>Amounts of Zn added to 2.5 mg Cu/kg basal diet<br>Pregnant Cheviot sheep, 20 days prior to parturition<br><br>Reduced feed consumption, weight gain, and feed utilization at 750 mg Zn/kg<br><br>Severe Cu deficiency, high incidence of abortions and still births. Reduced ceruloplasmin and amino oxidase activity at 750 mg Zn/kg, increased ceruloplasmin and amino-oxidase activity at 150 mg Zn/kg<br><br>SHEEP; COPPER; ZINC; BIOACCUMULATION; UNITED KINGDOM; ADULTS; NEWBORN; NUTRITIONAL DEFICIENCIES; BLOOD PLASMA; LIVER | Campbell, J.K.<br>Mills, C.F.<br>1979<br>Environmental Research<br>20:1-13 |

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Sheep
CVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 759<br>Bone | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 2.2-2.7 ppm<br>b) 2.9-4.4 ppm<br>Dry wt | a) 2.5 ppm<br>b) 3.7 ppm | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 760<br>Kidney | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 10-11 ppm<br>b) 10-10 ppm<br>Dry wt | a) 11 ppm<br>b) 10 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 761<br>Liver | Ingestion | NAA<br>ASV | a) 2<br>b) 2 | a) 188-218 ppm<br>b) 263-289 ppm<br>Dry wt | a) 203 ppm<br>b) 276 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Naschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 762<br>Liver | Ingestion | AAS | a) 3<br>b) 4<br>c) 12<br>d) 3<br>e) 10<br>f) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 79.8 +or- 38.6 mg/kg<br>b) 161.3 +or- 17.7 mg/kg<br>c) 8.4 +or- 1.7 mg/kg<br>d) 27.0 +or- 5.9 mg/kg<br>e) 13.0 +or- 2.9 mg/kg<br>f) 18.3 +or- 3.9 mg/kg | a) 30 mg Zn/kg<br>b) 150 mg Zn/kg<br>c) 750 mg Zn/kg<br>d) 30 mg Zn/kg and 2.5 mg Cu/kg<br>e) 750 mg Zn/kg and 2.5 mg Cu/kg<br>f) 750 mg Zn/kg and 10.0 mg Cu/kg<br>Levels in non-viable lambs born to ewes on 110 day diets containing 30-750 mg/kg Zn and 2.5-10.0 mg/kg Cu prior to parturition<br><br>Severe Cu deficiency, arrested growth of long bones. Kidney damage in one lamb<br><br>SHEEP; COPPER; ZINC; BIOACCUMULATION; UNITED KINGDOM; ADULTS; MEMBORN; NUTRITIONAL DEFICIENCIES; BLOOD PLASMA; LIVER | Campbell, J.K.<br>Mills, C.F.<br>1979<br>Environmental Research 20:1-13 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Shrew
SOREX CINEREUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 763<br>Body | | AAS | 85 | a) Not given<br>b) Not given | a) 5.2 ug/g<br>b) 4.1 +or- 0.5 ug/g<br>Wet wt | a) Ladysmith, 2 samples<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 768<br>Body | | AAS | 15 | a) Not given<br>b) Not given | a) 7.2 ug/g<br>b) 3.4 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 2 samples<br>* animals/composite sample<br>Trapped in or near unmined Cu-Zn deposits<br><br>Wisconsin (H)<br><br>MAMPS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Vole, meadow
PICROTUS PENNSYLVANICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 765<br>Body | | AAS | 40 | a) Not given<br>b) Not given | a) 3.4 ug/g<br>b) 4.1 +or- 0.8 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>* animals/composite sample<br>Trapped on or near unmined Cu-Zn deposits<br><br>Wisconsin (H)<br><br>MAMPS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 766<br>Body | | AAS | 35 | a) Not given<br>b) Not given | a) 4.1 +or- 0.6 ug/g<br>b) 4.8 ug/g<br>Wet wt | a) Ladysmith, 5 samples<br>b) Crandon, 2 samples<br>* animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (H)<br><br>MAMPS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 767<br>Milk | | GC | a) 24<br>b) 30 | a) 0.001-0.036 ppm<br>b) 0.011-0.583 ppm | a) 0.010 +or- 0.001 ppm<br>b) 0.088 +or- 0.018 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Ferozepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in HCH sprayed areas (1.5 g/sq m 3X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):545-557 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C
Reindeer
RANGIFER sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 768<br>Adipose | | | 24 | Not given | 70 +or- 22 ng/g | From low pesticide use area<br><br>Iceland<br><br>REINDEER; SHEEP; ICELAND; ADIPOSE TISSUE; BIOACCUMULATION; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE | Skaftason, J.F.<br>Johannesson, T.<br>1979<br>Acta Pharmacologica et Toxicologica 44:156-157 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 769<br>Adipose | | | 10 | Not given | 53 +or- 12 ng/g | Collected 1974<br>10 yr olds<br><br>Iceland<br><br>REINDEER; SHEEP; ICELAND; ADIPOSE TISSUE; BIOACCUMULATION; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE | Skaftason, J.F.<br>Johannesson, T.<br>1979<br>Acta Pharmacologica et Toxicologica 44:156-157 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.50 mm Hg, VP 0.005 mm Hg at 20 C
Buffalo, water
PCS BUFALTS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 770<br>Milk | | GC | a) 24<br>b) 30 | a) 0.002-0.124 ppm<br>b) 0.033-1.373 ppm | a) 0.017 +or- 0.005 ppm<br>b) 0.286 +or- 0.047 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Ferozepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in HCH sprayed areas (1.5 g/sq m 3X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):545-557 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.50 mm Hg, VP 0.005 mm Hg at 20 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 771<br>Adipose | | | 10 | Not given | 79 +or- 48 ng/g | Collected 1974<br>10 yr olds<br><br>Iceland<br><br>REINDEER; SHEEP; ICELAND; ADIPOSE TISSUE; BIOACCUMULATION; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE | Skaftason, J.F.<br>Johannesson, T.<br>1979<br>Acta Pharmacologica et Toxicologica 44: 156-157 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)
319-86-8
C6-H6-Cl6
MW 290.83, MP 141.5-142.0 C, BP 60 C at 0.34 mm Hg, VP 0.02 mm Hg at 20 C
Buffalo, water

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 772<br>Milk | | GC | a) 24<br>b) 30 | a) <0.005-0.050 ppm<br>b) 0.005-0.133 ppm | a) 0.011 +or- 0.002 ppm<br>b) 0.025 +or- 0.006 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Ferozepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in HCH sprayed areas (1.5 g/sq m 3X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):545-557 |

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-C16
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 773<br>Milk | | GC | a) 24<br>b) 30 | a) 0.002-0.023 ppm<br>b) 0.005-0.140 ppm | a) 0.008 +or- 0.001 ppm<br>b) 0.026 +or- 0.005 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Feroxepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in HCH sprayed areas (1.5 g/sq m 3X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):565-557 |

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 774<br>Kidney | Ingestion | | a) 1<br>b) 1<br>c) 1<br>d) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 0.07 ug/kg<br>b) Trace<br>c) 0.2 ug/kg<br>d) 0.2 ug/kg | a), b) 385-1925 ug zearalenone/kg and 20 ug aflatoxin B1/kg in diet for 7 wk<br>b), c) 317-1125 ug ochratoxin A/kg and 20 ug aflatoxin B1/kg in diet for 11 wk<br>Jersey milking cows<br><br>Multiple small grey lesions in kidneys<br><br>CATTLE; UNITED KINGDOM; ADULTS; KIDNEYS; MILK; URINE; AFLATOXINS; BIOACCUMULATION | Shreeve, B.J.<br>Patterson, D.S.P.<br>Roberts, B.A.<br>1979<br>Food and Cosmetics Toxicology 17:151-152 |
| 775<br>Liver | | HPLC | | Not given | 0.25 +or- 0.07 ng/g | Detection limit 0.05 ng/g<br>Random samples<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists<br>64(1):148-151 |
| 776<br>Milk | | HPLC | | Not given | 0.07 +or- 0.02 ng/g | Whole milk, random samples<br>Detection limit 0.05 ng/g<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists<br>64(1):148-151 |

(NEXT PAGE)

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 777<br>Milk | Ingestion | | a) 1<br>b) 1<br>c) 1<br>d) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 0.06 ug/kg<br>b) Trace<br>c) 0.06 ug/kg<br>d) 0.06 ug/kg | a), b) 385-1925 ug zearalenone/kg and 20 ug aflatoxin B1/kg in diet for 7 wk<br>b), c) 317-1125 ug ochratoxin A/kg and 20 ug aflatoxin B1/kg in diet for 11 wk<br>Jersey milking cows<br><br>Multiple small grey lesions in kidneys<br><br>CATTLE; UNITED KINGDOM; ADULTS; KIDNEYS; MILK; URINE; AFLATOXINS; BIOACCUMULATION | Shreeve, B.J.<br>Patterson, D.S.P.<br>Roberts, B.A.<br>1979<br>Food and Cosmetics Toxicology 17:151-152 |
| 778<br>Urine | Ingestion | | a) 1<br>b) 1<br>c) 1<br>d) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 0.60 ug/kg<br>b) 0.12 ug/kg<br>c) 0.09 ug/kg<br>d) 0.22 ug/kg | a), b) 385-1925 ug zearalenone/kg and 20 ug aflatoxin B1/kg in diet for 7 wk<br>b), c) 317-1125 ug ochratoxin A/kg and 20 ug aflatoxin B1/kg in diet for 11 wk<br>Jersey milking cows<br><br>Multiple small grey lesions in kidneys<br><br>CATTLE; UNITED KINGDOM; ADULTS; KIDNEYS; MILK; URINE; AFLATOXINS; BIOACCUMULATION | Shreeve, B.J.<br>Patterson, D.S.P.<br>Roberts, B.A.<br>1979<br>Food and Cosmetics Toxicology 17:151-152 |

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 779<br>Liver | | HPLC | | Not given | 0.76 +or- 0.01 ng/g | 1200 ng aflatoxin B1/g feed for 3 wk<br>Detection limit 0.05 ng/g<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists 64(1):144-151 |

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI)
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)
1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 780 Liver | | HPLC | | Not given | 0.72 +or- 0.42 ng/g | Detection limit 0.05 ng/g<br>Random samples<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists<br>64(1):148-151 |

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI)
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)
1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 781 Adipose | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) <0.2 ppb<br>b) <0.2 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi) [C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |
| 782 Bile | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 1.3 ppb<br>b) 2.9 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi) [C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |
| 783 Blood, plasma | Ingestion | Radiometry | ? | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 330 dpm/ml<br>b) 305 dpm/ml<br>c) 240 dpm/ml<br>d) 100 dpm/ml<br>Estimated from graph | a) 1 d<br>b) 2 d<br>c) 5 d<br>d) 10 d<br>Days after 5 ug (0.3 uCi) [C14]AFB1/kg body wt<br>Piglet (Hampshire X Deutsches Edelschwein, wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |

(NEXT PAGE)

Cyclopenta(c)furo(3',2':8,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI)
Cyclopenta(c)furo(3',2':8,9)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis) - (9 CI)
1162-65-8
C17-H12-O6
MW 312.1, MP 268-269 C
Swine
spr ap.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 784<br>Brain | Ingestion | | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) <0.2 ppb<br>b) <0.2 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi)<br>[C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches<br>Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND;<br>ADIPOSE TISSUE; BILE; BLOOD PLASMA;<br>BRAIN; FECES; HEART; KIDNEYS; LIVER;<br>LUNGS; MUSCLES; SPLEEN; URINE;<br>AFLATOXINS; BIOACCUMULATION;<br>METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics<br>Toxicology 18:253-256 |
| 785<br>Heart | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 0.5 ppb<br>b) 0.5 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi)<br>[C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches<br>Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND;<br>ADIPOSE TISSUE; BILE; BLOOD PLASMA;<br>BRAIN; FECES; HEART; KIDNEYS; LIVER;<br>LUNGS; MUSCLES; SPLEEN; URINE;<br>AFLATOXINS; BIOACCUMULATION;<br>METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics<br>Toxicology 18:253-256 |
| 786<br>Kidney | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 2.4 ppb<br>b) 1.3 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi)<br>[C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches<br>Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND;<br>ADIPOSE TISSUE; BILE; BLOOD PLASMA;<br>BRAIN; FECES; HEART; KIDNEYS; LIVER;<br>LUNGS; MUSCLES; SPLEEN; URINE;<br>AFLATOXINS; BIOACCUMULATION;<br>METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics<br>Toxicology 18:253-256 |
| 787<br>Liver | | HPLC | | Not given | 0.27 +or- 0.02 ng/g | 1200 ng aflatoxin B1/g feed for 3 wk<br>Detection limit 0.05 ng/g<br><br>CATTLE; SWINE; FISHES; LIVER; MILK;<br>COMPARATIVE EVALUATIONS; MEASUREMENT<br>METHODS; AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the<br>Association of Official<br>Analytical Chemists<br>64(1):148-151 |
| 788<br>Liver | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 17.3 ppb<br>b) 17.3 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi)<br>[C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches<br>Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND;<br>ADIPOSE TISSUE; BILE; BLOOD PLASMA;<br>BRAIN; FECES; HEART; KIDNEYS; LIVER;<br>LUNGS; MUSCLES; SPLEEN; URINE;<br>AFLATOXINS; BIOACCUMULATION;<br>METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics<br>Toxicology 18:253-256 |

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI)
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis) - (9 CI)
1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 789<br>Lung | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 1.0 ppb<br>b) 0.7 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi) [C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |
| 790<br>Muscle | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) <0.2 ppb<br>b) <0.2 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi) [C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |
| 791<br>Spleen | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 0.4 ppb<br>b) 0.4 ppb | a) 24 hr<br>b) 48 hr<br>Times after 3.1 ug (0.2 uCi) [C14]AFB1/kg body wt<br>Piglets (Hampshire X Deutsches Edelschwein), wt 15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |
| 792<br>Urine | Ingestion | Radiometry | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 15.7%<br>b) 9.6% | a) Pig 1<br>b) Pig 2<br>% of a 5 ug (0.3 uCi) [C14]AFB1/kg body wt dose after 9 d, collected at 24 hr intervals<br>Piglets (Hampshire X Deutsches Edelschwein), wt 10-15 kg<br><br>SWINE; JUVENILES; SWITZERLAND; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; FECES; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; AFLATOXINS; BIOACCUMULATION; METABOLISM; METABOLITES | Luthy, J.<br>Zweifel, U.<br>Schlatter, Ch.<br>1980<br>Food and Cosmetics Toxicology 18:253-256 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 793<br>Milk | | GC | a) 24<br>b) 30 | a) 0.089-1.568 ppm<br>b) 0.087-0.490 ppm | a) 0.368 +or- 0.367 ppm<br>b) 0.153 +or- 0.117 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Ferozepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in DDT sprayed areas (1 g/sq m 2X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; PENTACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):545-557 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Cod
GADUS MORHUA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 794<br>Liver | | | a) 15<br>b) 21<br>c) 17 | a) 0.38-1.42 mg/kg<br>b) 0.41-1.98 mg/kg<br>c) <0.03-1.99 mg/kg | a) 0.81 +or- 0.35 mg/kg<br>b) 0.95 +or- 0.38 mg/kg<br>c) 0.31 +or- 0.49 mg/kg | a) Kotka, Gulf of Bothnia<br>b) Hanko, Gulf of Finland<br>c) Pori, Gulf of Finland<br>Significantly higher levels in Gulf of Finland samples<br>2 yr olds, length 25-35 cm, collected as by-catch of herring-trawl<br><br>Baltic Sea (N), Finnish coast<br><br>BIOACCUMULATION; FISHES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; LIVER; FINLAND | Wickstrom, K.<br>Pyysalo, H.<br>Perttila, M.<br>1981<br>Chemosphere<br>10(9):999-1004 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Dolphin, white-beaked
LAGENORHYNCHUS ALBIROSTRIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 795<br>Adipose | | GC | 5 | 34-71 mg/kg lipid wt | 53 mg/kg lipid wt | Drowned in fishing net, ages 4-10 yr<br>Blubber, some muscle<br><br>North Sea, Scotland (E)<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

DDT, total (No postings in CHEMLINE).
EC-29-3
C14-H9-C15
MW 354.50
Kestrel
FALCO TINNUNCULUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 796<br>Kidney | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 560 +or- 60 ppb<br>b) 430 +or- 40 ppb<br>c) 600 +or- 30 ppb<br>d) 240 +or- 20 ppb<br>e) 26 +or- 3 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 797<br>Liver | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 270 +or- 10 ppb<br>b) 380 +or- 10 ppb<br>c) 290 +or- 10 ppb<br>d) 370 +or- 20 ppb<br>e) 10 +or- 2 ppt<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 798<br>Muscle | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 200 +or- 10 ppb<br>b) 100 +or- 10 ppb<br>c) 140 +or- 10 ppb<br>d) 100 +or- 10 ppb<br>e) 24 +or- 1 ppt<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas,<br>b), c) country districts<br>Pectoral muscle<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
lagesild
CCREGONUS ALBULA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 799<br>Liver | | GC | a) 7<br>b) 24<br>c) 16<br>d) 12<br>e) 13 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 3.1 +or- 2.1 ppm<br>b) 0.7 +or- 1.7 ppm<br>c) 1.7 +or- 1.1 ppm<br>d) 0.8 +or- 0.1 ppm<br>e) 1.3 +or- 0.4 ppm<br>lipid wt | a) 1974<br>b) 1975<br>c) 1976<br>d) 1977<br>e) 1979<br>Wt < 0.3 kg, mean age 5.7 yr<br>Collected during spawning season<br>Agricultural, industrial, and urban pollution sources<br><br>Norway (E), Lake Mjosa<br><br>LIVER; NORWAY; DDT; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; WATER POLLUTION | Brevik, E.M.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:679-680 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Owl, barn
TYTO ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 800<br>Kidney | | GC/MS | 1 | Not applicable | 150 +or- 10 ppb wet wt<br>(680 +or- 50 ppb dry wt) | Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 801<br>Liver | | GC/MS | 1 | Not applicable | 50 +or- 2 ppb wet wt<br>(180 +or- 10 ppb dry wt) | Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 802<br>Muscle | | GC/MS | 1 | Not applicable | 30 +or- 1 ppb wet wt<br>(110 +or- 11 ppb dry wt) | Pectoral muscle<br>Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-C15
MW 354.50
Seal, harbor
PHOCA VITULINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 803<br>Adipose | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 47 mg/kg<br>b) 15 mg/kg<br>c) 12 mg/kg<br>Lipid wt | a) Ijmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br>Blubber, some muscle in IJmuiden seal<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 804<br>Brain | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 5.0 mg/kg<br>b) 0.8 mg/kg<br>c) 2.3 mg/kg<br>Lipid wt | a) Ijmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 805<br>Liver | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 15 mg/kg<br>b) 2.6 mg/kg<br>c) 13 mg/kg<br>Lipid wt | a) Ijmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-C15
MW 354.50
Sparrowhawk
ACCIPITER NISUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 806<br>Kidney | | GC/MS | 1 | Not applicable | 710 +or- 150 ppb wet wt<br>(23,000 +or- 460 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BICACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, R.E.<br>1980<br>Science of the Total Environment 15:237-246 |

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DDT, total (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Sparrowhawk
ACCIPITER NISUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 807<br>Liver | | GC/MS | 1 | Not applicable | 470 +or- 70 ppb wet wt<br>(13,900 +or- 280 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 808<br>Muscle | | GC/MS | 1 | Not applicable | 210 +or- 50 ppb wet wt<br>(8,900 +or- 180 ppb dry wt) | Pectoral muscle<br>East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Dibenzo(b,e)(1,4)dioxin, heptachloro-
37871-00-4
C12-H-Cl7-O2
MW 425.28
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 809<br>Liver | Ingestion | GC-EC | 4 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.1 ppb<br>b) 0.3 ppb<br>c) 0.2 ppb<br>d) 0.1 ppb<br>e) 0.3 ppb<br>Wet wt | a) Longissimus dorsi (loin steak), charbroiled, rare, 60 C<br>b) Longissimus dorsi, charbroiled, well done, 77 C<br>c) Semimembranosus (top round), cooked<br>d) Hamburger, raw<br>e) Hamburger, charbroiled, very well done, > 77 C<br>Holstein dairy cows fed technical grade pentachlorophenol (0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days)<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:344-349 |
| 810<br>Muscle | Ingestion | GC-EC | 4 | a) Not given<br>b) Not given | a) 10 ppb<br>b) 20 ppb<br>Wet wt | a) Raw<br>b) Panfried to 77 C<br>Holstein dairy cows fed technical grade pentachlorophenol. 0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:344-349 |

Dibenzo(b,e)(1,4)dioxin, hexachloro-
34465-46-8
C12-H2-C16-O2
MW 390.84
Cattle
PCS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 813<br>Liver | Ingestion | GC-EC | 4 | a) Not given<br>b) Not given | a) 3.2 ppb<br>b) 3.8 ppb<br>Wet wt | a) Raw<br>b) Panfried to 77 C<br>Holstein dairy cows fed technical grade pentachlorophenol (0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days)<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:348-349 |
| 812<br>Muscle | Ingestion | GC-EC | 5 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.1 ppb<br>b) 0.3 ppb<br>c) 0.4 ppb<br>d) 0.2 ppb<br>e) 0.5 ppb<br>Wet wt | a) Longissimus dorsi (loin steak), charbroiled, rare, 60 C<br>b) Longissimus dorsi, charbroiled, well done, 77 C<br>c) Hamburger, raw<br>d) Hamburger, charbroiled, well done, 77 C<br>e) Hamburger, very well done, > 77 C<br>Holstein cows fed technical grade pentachlorophenol (0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days)<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:348-349 |

Dibenzo-p-dioxin, octachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, octachloro- (9 Cl)
3268-87-9
C12-C18-O2
MW 459.72
Cattle
PCS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 813<br>Liver | Ingestion | GC-EC | 4 | a) Not given<br>b) Not given | a) 183 ppb<br>b) 187 ppb<br>Wet wt | a) Raw<br>b) Panfried to 77 C<br>Holstein dairy cows fed technical grade pentachlorophenol (0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days)<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:348-349 |

(NEXT PAGE)

Dibenzo [illegible]rin, c[illegible]c- (8 CI)
Dibenzo[illegible]-1,4)dioxin, octachloro- (9 CI)
3268-87-9
C12-C18-02
PB 459,72
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 814 Muscle | Ingestion | GC-EC | 4 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given<br>m) Not given<br>n) Not given<br>o) Not given | a) 0.5 ppb<br>b) 1.3 ppb<br>c) 1.6 ppb<br>d) 1.3 ppb<br>e) 2.1 ppb<br>f) 1.3 ppb<br>g) 1.9 ppb<br>h) 1.0 ppb<br>i) 2.5 ppb<br>j) 1.2 ppb<br>k) 2.3 ppb<br>l) 2.0 ppb<br>m) 1.1 ppb<br>n) 2.1 ppb<br>o) 2.0 ppb<br>Wet wt | a) Longissimus dorsi (loin steak), raw<br>b) Longissimus dorsi, charbroiled, rare, 60 C<br>c) Longissimus dorsi, charbroiled, well done, 77 C<br>d) Semimembranosus (top round), raw<br>e) Semimembranosus, cooked<br>f) Biceps femoris (bottom round), raw<br>g) Biceps femoris, cooked<br>h) Quadraceps (stew), raw<br>i) Quadraceps, cooked<br>j) Ground round, raw<br>k) Ground round, charbroiled, well done, 77 C<br>l) Ground round, charbroiled, very well done, > 77 C<br>m) Hamburger, raw<br>n) Hamburger, charbroiled, well done, 77 C<br>o) Hamburger, charbroiled, very well done, > 77 C<br>Holstein dairy cows fed technical grade pentachlorophenol (0.2 mg/kg for 75 days, then 2.0 mg/kg for 60 days)<br><br>CATTLE; MICHIGAN; ADULTS; LIVER; MUSCLES; BIOACCUMULATION; PESTICIDE RESIDUES; PENTACHLOROPHENOL | Zabik, M.E.<br>Zabik, M.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:348-349 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo(b,e)[1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H4-C14-02
PB 322, MP 305 C
Bass, smallmouth
MICROPTERUS DOLOMIEUI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 815 Muscle | | GC/MS | 6 | 7-9 ppt | 8 ppt | Collected 1978<br>Detection limit 6 ppt<br><br>Lake Michigan, Tittabawassee, Grand, and Saginaw Rivers<br><br>MICHIGAN; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES | Harless, R.L.<br>Oswald, E.O.<br>Lewis, R.G.<br>Dupuy, A.E., Jr.<br>McDaniel, D.D.<br>Tai, H.<br>1982<br>Chemosphere 11(2):193-198 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Carp
CYPRINUS CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 816 Muscle | | GC/MS | 14 | 20-153 ppt | 55 ppt | Collected 1978<br>Detection limit 7 ppt<br>Lake Michigan, Tittabawassee, Grand, and Saginaw Rivers<br>MICHIGAN; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES | Harless, R.L.<br>Oswald, E.O.<br>Lewis, R.G.<br>Dupuy, A.E., Jr.<br>McDaniel, D.D.<br>Tai, H.<br>1982<br>Chemosphere<br>11(2):193-198 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 817 Muscle | | GC/MS | 8 | 28-695 ppt | 157 ppt | Collected 1978<br>Detection limit 13 ppt<br>Lake Michigan, Tittabawassee, Grand, and Saginaw Rivers<br>MICHIGAN; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES | Harless, R.L.<br>Oswald, E.O.<br>Lewis, R.G.<br>Dupuy, A.E., Jr.<br>McDaniel, D.D.<br>Tai, H.<br>1982<br>Chemosphere<br>11(2):193-198 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Perch, yellow
PERCA FLAVESCENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 818 Muscle | | GC/MS | 6 | 10-20 ppt | 14 ppt | Collected 1978<br>Detection limit 6 ppt<br>Lake Michigan, Tittabawassee, Grand, and Saginaw Rivers<br>MICHIGAN; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES | Harless, R.L.<br>Oswald, E.O.<br>Lewis, R.G.<br>Dupuy, A.E., Jr.<br>McDaniel, D.D.<br>Tai, H.<br>1982<br>Chemosphere<br>11(2):193-198 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Rabbit

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 819<br>Liver | | GC | a) 67<br>b) 19<br>c) 137<br>d) 86 | a) 3.7-633.0 ng/g<br>b) 7.0-383.0 ng/g<br>c) 0.27-460.0 ng/g<br>d) 0.32-55.0 ng/g | a) 84.9 +or- 12.5 ng/g<br>b) 90.1 +or- 25.4 ng/g<br>c) 25.7 +or- 6.3 ng/g<br>d) 12.8 +or- 6.2 ng/g | a) Zone A, 5 km perimeter (mean top soil level 280 ug/sq m)<br>b) Zone B, 16.5 km perimeter (mean top soil level 3 ug/sq m)<br>c) Zone C, 26 km perimeter<br>d) Surrounding areas<br>Collected in contaminated zones after chemical plant accident, 7/10-9/30/76<br><br>Italy, Seveso<br><br>Mortality in Zone A 38.9%, Zone B 8.8%, Zone C 6.8%<br><br>Substernal and retrosternal edema, hemorrhagic tracheitis, pleural serous hemorrhage, liver dystrophic lesions<br><br>RABBITS; ITALY; AUTOPSIES; LIVER DISEASES; LIVER; BIOACCUMULATION; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS | Pamelli, P.<br>Bertoni, M.P.<br>Castelli, M.G.<br>Chiabrando, C.<br>Martelli, G.P.<br>Momeda, A.<br>Garattini, S.<br>Binaghi, C.<br>Marazza, V.<br>Penza, P.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:569-577 |

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Sucker
CATOSTOMUS COMMERSONI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 820<br>Muscle | | GC/MS | 4 | 4-21 ppt | 11 ppt | Collected 1978<br>Detection limit 4 ppt<br><br>Lake Michigan, Tittabawassee, Grand, and Saginaw Rivers<br><br>MICHIGAN; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES | Harless, R.L.<br>Oswald, E.O.<br>Lewis, R.G.<br>Dupuy, A.E., Jr.<br>McDaniel, D.D.<br>Tai, H.<br>1982<br>Chemosphere 11(2):193-198 |

Dodecane, 1-cycloheryl- (9 CI)
Cyclohexane, dodecyl- (9 CI)
1795-17-1
C18-H36
MW 252.49
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 821 Adipose | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 0.6%<br>b) 2.3% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |
| 822 Bile | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 0.31%<br>b) 0.03% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |
| 823 Kidney | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 0.25%<br>b) 0.18% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |
| 824 Liver | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 1.7%<br>b) 0.6% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |
| 825 Muscle | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 15.5<br>b) 9.5% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |
| 826 Skin | Ingestion | Radiometry | | a) Not given<br>b) Not given | a) 2.7%<br>b) 1.5% | a) 24 hr<br>b) 1 wk<br>Times after 100 uCi<br>H3-dodecyclohexane<br>% of total radioactivity<br>Wt 200-250 g<br><br>HYDROCARBONS; BIOACCUMULATION; FISHES; FRANCE; ADIPOSE TISSUE; BILE; KIDNEYS; LIVER; MUSCLES; SKIN | Cravedi, J.P.<br>Tulliez, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26: 337-344 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichlorcethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
FW 350.46, MP 221-222 C
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 827 Muscle | | GC-EC | 13 | Not given | 36 ng/g | Maximum value Collected 10/79 Texas/Oklahoma, Lake Texoma OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
FW 350.46, MP 221-222 C
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 828 Milk | | GC | a) 26 b) 30 | a) 0.011-0.800 ppm b) 0.004-0.257 ppm | a) 0.187 +or- 0.051 ppm b) 0.064 +or- 0.009 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas b) Ferozepur/Sangrur, HCH sprayed rural areas Significantly higher levels in DDT sprayed areas (1 g/sq m 2X/yr inside houses and cattle sheds) Whole milk India, Punjab WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K. Chawla, H.P. Kalra, R.L. 1980 Journal of Environmental Science and Health B15(5):545-557 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
FW 350.46, MP 221-222 C
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 829 Muscle | | GC-EC | 11 | Not given | 9 ng/g | Maximum value Collected 10/79 Texas/Oklahoma, Lake Texoma OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 830 | | GC-EC | 7 | Not given | 11 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.R.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Duck, wood
AIX SPONSA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 831<br>Eggs | | GC-EC | 5 | 0.00-0.69 ppm wet wt | 0.17 ppm wet wt | Collected near former DDT manufacturing plant, 7-9/79<br>Addled eggs from 5 nests<br><br>Alabama (N), Wheeler National Wildlife Refuge, Blackwell Springs<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Cromartie, E.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |
| 832<br>Muscle | | GC-EC | a) 4<br>b) 6 | a) 0.0-1.6 ppm<br>b) 0.16-1.6 ppm<br>Wet wt | a) 0.4 ppm<br>b) 0.56 ppm<br>Wet wt | a) Blackwell Springs<br>b) Huntsville Spring Branch<br>Breast muscle<br>Collected near former DDT manufacturing plant, 7-9/79<br>Juveniles, age 60-140 days<br><br>Alabama (N), Wheeler National Wildlife Refuge<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Cromartie, E.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichlorcethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-C14
MW 350.46, MP 221-222 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 833<br>Body | | GC | 46 | Not given | 74 ppm lipid wt<br>Geometric mean | 2.7% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACELOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toricology and Environmental Health 8:325-330 |
| 834<br>Brain | | GC | 46 | Not given | 0.44 ppm wet wt<br>Geometric mean | 6.9% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toricology and Environmental Health 8:325-330 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-C14
MW 350.46, MP 221-222 C
Fish
LEUCISCUS CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 835<br>Muscle | | GC-EC | | 0.002-0.02 ppm | 0.011 +or- 0.007 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Nasheny-Tonkabony, S.E.<br>Gharibzadeh, H.<br>1979<br>Environmental Research 18:276-280 |
| 836<br>Muscle | | GC-EC | | a) 0.0036-0.02 ppm<br>b) 0.01-0.01 ppm | a) 0.01 +or- 0.003 ppm<br>b) 0.01 ppm | a) Lake Karadj<br>b) Lake Latian<br>Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentration in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Nasheny-Tonkabony, S.E.<br>Gharibzadeh, H.<br>1979<br>Environmental Research 18:276-280 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Osprey
PANDION HALIAETUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 837<br>Eggs | | | 7 | Not given | <2.5 ppm lipid wt | Collected 1972<br>Shell thickness 0.42-0.52 mm (normal value 0.5 mm)<br><br>Gulf of California<br><br>BIRDS; EGGS; CALIFORNIA; MEXICO; CHLORINE ORGANIC COMPOUNDS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Henny, C.J.<br>Anderson, D.W.<br>1979<br>Bulletin of the Southern Academy of Sciences 78(2):89-104 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 838<br>Muscle | | GC-EC | 14 | Not given | 3 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Trout
ONCORHYNCHUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 839<br>Muscle | | GC-EC | | 0.004-0.02 ppm | 0.012 +or- 0.0084 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Nasheey-Tcahabony, S.E.<br>Gharibzadeh, H.<br>1979<br>Environmental Research 18:276-280 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Trout, brown
SALMO TRUTTA FARIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 842 Muscle | | GC-EC | | a) 0.006-0.10 ppm b) 0.002-0.05 ppm | a) 0.008 +or- 0.005 ppm b) 0.016 +or- 0.05 ppm | a) Lake Karadj b) Lake Latian Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E. Gharibzadeh, M. 1979 Environmental Research 18:276-280 |

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 841 Muscle | | GC-EC | | 0.022-0.08 ppm | 0.022 +or- 0.005 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Tehran, Iran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E. Gharibzadeh, M. 1979 Environmental Research 18:276-280 |

Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI)
Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)
789-02-6
C14-H9-Cl5
MW 354.49, MP 74-74.5 C (cor)
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 842 Muscle | | GC-EC | 13 | Not given | 14 ng/g | Maximum value Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MOLLUSCS; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Huster, H.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI)
Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)
789-02-6
C14-H9-Cl5
MW 354.49, BP 74-74.5 C (cor)
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 843<br>Muscle | | GC-EC | 11 | Not given | 11 ng/g<br>Maximum | Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES;<br>BIOACCUMULATION; WATER POLLUTION;<br>FISHES; DDD; DDE; DDT; DIELDRIN;<br>CHLORINE ORGANIC COMPOUNDS;<br>HEPTACHLOR EPOXIDE; POLYCHLORINATED<br>BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring<br>Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI)
Benzene, 1-chloro-2-(2,2,2-trichloro-1-(4-chlorophenyl)ethyl)- (9 CI)
789-02-6
C14-H9-Cl5
MW 354.49, BP 74-74.5 C (cor)
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 844<br>Muscle | | GC-EC | 14 | Not given | 11 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES;<br>BIOACCUMULATION; WATER POLLUTION;<br>FISHES; DDD; DDE; DDT; DIELDRIN;<br>CHLORINE ORGANIC COMPOUNDS;<br>HEPTACHLOR EPOXIDE; POLYCHLORINATED<br>BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring<br>Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 845<br>Muscle | | GC-EC | 8 | Not given | 410 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES;<br>BIOACCUMULATION; WATER POLLUTION;<br>FISHES; DDD; DDE; DDT; DIELDRIN;<br>CHLORINE ORGANIC COMPOUNDS;<br>HEPTACHLOR EPOXIDE; POLYCHLORINATED<br>BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring<br>Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Buffalo, smallmouth
ICTIOEUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 846<br>Muscle | | GC-EC | 13 | Not given | 26 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDE; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 847<br>Milk | | GC | a) 24<br>b) 30 | a) 0.010-0.457 ppm<br>b) 0.009-0.093 ppm | a) 0.101 +or- 0.021 ppm<br>b) 0.029 +or- 0.004 ppm | a) Ludhiana/Jullandur, DDT sprayed rural areas<br>b) Ferozepur/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in DDT sprayed areas (1 g/sq m 2X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCICLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, R.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health B15(5):545-557 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 848<br>Muscle | | GC-EC | 11 | Not given | 10 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 849<br>Muscle | | GC-EC | 7 | Not given | 189 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Chicken
GALLUS GALLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 850<br>Eggs | Intravitelline | GC | 200 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 40 ppm<br>b) 2.1 ppm<br>c) 253 ppm<br>d) 1.7 ppm<br>e) 301 ppm<br>f) 2.8 ppm | a) After 5 mg, yolks of 5-day old embryos<br>b) After 5 mg, 5-day old embryos<br>c) After 10 mg, yolks of 5-day old embryos<br>d) After 10 mg, 5-day old embryos<br>e) After 20 mg, yolks of 5-day old embryos<br>f) After 20 mg, 5-day old embryos<br>White Leghorn eggs<br><br>Mortality of treated embryos 4.3-6.3%, controls 5.8%<br><br>CHICKENS; EGGS; MISSOURI; BIOACCUMULATION; DDT; PESTICIDES | Swartz, W.J.<br>Schutzsana, R.L.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:393-396 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Duck, wood
AIX SPONSA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 851<br>Eggs | | GC-EC | 5 | 0.00-0.37 ppm wet wt | 0.07 ppm wet wt | Collected near former DDT manufacturing plant, 7-9/79<br>Addled eggs from 5 nests<br><br>Alabama (N), Wheeler National Wildlife Refuge, Blackwell Springs<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Cromartie, E.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |

(NEXT PAGE)

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.5°0, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Duck, wood
AIX SPONSA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 852 Muscle | | GC-EC | a) 8<br>b) 6 | a) 0.0-0.48 ppm<br>b) 0.0-0.5 ppm<br>Wet wt | a) 0.12 ppm<br>b) 0.1 ppm<br>Wet wt | a) Blackwell Springs<br>b) Huntsville Spring Branch<br>breast muscle<br>Collected near former DDT manufacturing plant, 7-8/79<br>Juveniles, age 60-140 days<br><br>Alabama (N), Wheeler National Wildlife Refuge<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Cromartie, E.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.5°0, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 853 Body | | GC | 13 | Not given | 25 ppm lipid wt<br>Geometric mean | 1.8% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-78<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 854 Brain | | GC | 13 | Not given | 0.40 ppm wet wt<br>Geometric mean | 6.7% lipid<br>Wild birds, dead or moribund, collected 1971-78<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN, HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5E10(E-7) mm Hg at 20 C
Fish
VARICORHINUS MIRCLSKII

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 855<br>Muscle | | GC-EC | | a) 0.02-0.03 ppm<br>b) 0.01-0.01 ppm | a) 0.025 +or- 0.017 ppm<br>b) 0.01 ppm | a) Lake Karadj<br>b) Lake Latian<br>Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research 18:276-280 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5E10(E-7) mm Hg at 20 C
Ibis, glossy
PLEGADIS FALCINELLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 856<br>Eggs | | GC-EC | 10 | Not detected-2.64 ug/g wet wt | Not given | 1972<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; DDT; SPAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5E10(E-7) mm Hg at 20 C
Trout, brown
SALMO TRUTTA FARIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 857<br>Muscle | | GC-EC | | 0.05-0.08 ppm | 0.065 +or- 0.005 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research 18:276-280 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5E10(E-7) mm Hg at 20 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 858<br>Muscle | | GC-EC | | 0.010-0.10 ppm | 0.041 +or- 0.005 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Nasheey-Tonkabony, S.E.<br>Gharibzadeh, H.<br>1979<br>Environmental Research 18:276-280 |

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5E10(E-7) mm Hg at 20 C
Turtle, green
CHELONIA MYDAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 859<br>Eggs | | GC | 2 | Not detected-0.042 ppm wet wt | Not given | Eggs from 2 clutches. Collected as they were laid, frozen after 43-52 d incubation. Significant decrease during incubation<br><br>Florida, Merritt Island<br><br>EGGS; TURTLES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS; FLORIDA | Clark, D.R., Jr.<br>Krynitsky, A.J.<br>1980<br>Pesticides Monitoring Journal 14(1):7-10 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 860<br>Body | | GC-EC | 6 | 0.5-2.6 ppm wet wt | 1.49 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Bass, largesouth
MICROPTERUS SALMOIDES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 861<br>Muscle | | GC-EC | 3 | Not given | 1 ng/g<br>Median | 3 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>CHLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 862<br>Muscle | | GC-EC | 8 | Not given | 4 ng/g<br>Median | 37 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>CHLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Bass, white
MORONE CHRYSOPS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 863<br>Muscle | | | 14 | Not given | 4 ng/g<br>Median | 12 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>CHLAHOMA; TEXAS; MUSCLES; BICACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethyler ',1-dichlo -bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dich: ...enylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 864<br>Muscle | | GC-EC | 13 | Not given | 29 ng/g<br>Median | 121 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Buffalo, water
BOS BUBALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 865<br>Milk | | GC | a) 24<br>b) 30 | a) 0.016-0.311 ppm<br>b) 0.015-0.147 ppm | a) 0.080 +or- 0.013 ppm<br>b) 0.049 +or- 0.005 ppm | a) Ludhiana/Jullundur, DDT sprayed rural areas<br>b) Feroneper/Sangrur, HCH sprayed rural areas<br>Significantly higher levels in DDT sprayed areas (1 g/sq m 2X/yr inside houses and cattle sheds)<br>Whole milk<br><br>India, Punjab<br><br>WATER BUFFALO; INDIA; MILK; DDE; DDT; HEXACHLOROCYCLOHEXANE; BIOACCUMULATION; FOOD CONTAMINATION; PESTICIDE RESIDUES; RURAL AREAS | Kapoor, S.K.<br>Chawla, H.P.<br>Kalra, R.L.<br>1980<br>Journal of Environmental Science and Health<br>B15(5):545-557 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Carp
CYPRINUS CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 866<br>Muscle | | GC-EC | 7 | Not given | 8 ng/g<br>Median | 54 ng/g maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 867 Muscle | | GC-EC | 11 | Not given | 35 ng/g Median | 127 ng/g maximum value Collected 10/79 Texas/Oklahoma, Lake Texoma OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Catfish, blue
ICTALURUS FURCATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 868 Muscle | | GC-EC | 2 | Not given | 12 ng/g Median | 20 ng/g maximum value Collected 10/79 Texas/Oklahoma, Lake Texoma OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 869 Muscle | | GC-EC | 7 | Not given | 10 ng/g Median | 104 ng/g maximum value Collected 10/79 Texas/Oklahoma, Lake Texoma OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Catfish, flathead
PYLODICTUS OLIVARUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 870<br>Muscle | | GC-EC | 1 | Not applicable | 34 ng/g | Collected 10/79<br>Texas/Oklahoma, Lake Texoma<br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDE; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.M.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Crappie, white
POMOXIS ANNULARUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 871<br>Muscle | | GC-EC | 19 | Not given | 2 ng/g | Maximum value<br>Collected 10/79<br>Texas/Oklahoma, Lake Texoma<br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.M.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 872<br>Eggs | | GC-EC | 49 | a) Not detected-0.58 ppm<br>b) Not detected<br>c) 0.19-2.0 ppm<br>d) Not detected-1.2 ppm<br>e) 0.12-0.96 ppm<br>f) 0.14-1.2 ppm<br>g) 0.26-1.0 ppm<br>h) 0.25-0.50 ppm<br>i) Not applicable<br>j) 0.84-1.4 ppm<br>k) 0.09-0.12 ppm<br>l) Not detected | a) 0.32 +or- 0.15 ppm<br>b) Not detected<br>c) 0.64 +or- 0.45 ppm<br>d) 0.26 +or- 0.19 ppm<br>e) 0.32 +or- 0.15 ppm<br>f) 0.44 +or- 0.25 ppm<br>g) 0.63 +or- 0.37 ppm<br>h) 0.36 +or- 0.05 ppm<br>i) 0.11 ppm<br>j) 2.0 +or- 0.25 ppm<br>k) 0.10 +or- 0.02 ppm<br>l) Not detected | a) Nova Scotia, 3 clutches<br>b) New Brunswick, 1 clutch<br>c) Quebec, 4 clutches<br>d) Maine, 6 clutches<br>e) New Hampshire, 5 clutches<br>f) Vermont, 4 clutches<br>g) Massachusetts, 2 clutches<br>h) Rhode Island, 5 clutches<br>i) Pennsylvania, 1 clutch<br>j) Delaware, 10 clutches<br>k) Maryland, 2 clutches<br>l) Virginia, 6 clutches<br>1 egg/clutch analyzed<br>Collected 1978<br>Shell thickness 0.387 mm, identical tc pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDE; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Hameltine, S.D.<br>Hulhern, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Duck, wood
AIX SPONSA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 873<br>Eggs | | GC-EC | a) 5<br>b) 5 | a) 0.15-0.3 ppm<br>b) 0.48-4.3 ppm<br>Wet wt | a) 0.22 ppm<br>b) 2.0 ppm<br>Wet wt | a) Garth Slough<br>b) Blackwell Springs<br>Collected near former DDT manufacturing plant, 7-9/79<br>Addled eggs from 5 nests<br><br>Alabama (M), Wheeler National Wildlife Refuge<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Crossartie, K.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |

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Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MF 88.4 C
Duck, wood
AIX SPONSA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 874<br>Muscle | | GC-EC | a) 5<br>b) 4<br>c) 4<br>d) 6<br>e) 5 | a) 0.0-1.4 ppm<br>b) 0.0-4.5 ppm<br>c) 0.0-1.6 ppm<br>d) 0.14-5.8 ppm<br>e) 0.0-0.18 ppm<br>Wet wt | a) 0.42 ppm<br>b) 1.3 ppm<br>c) 0.46 ppm<br>d) 2.8 ppm<br>e) 0.06 ppm<br>Wet wt | a) Swan Creek Management Area<br>b) Blackwell Springs<br>c) Swan Pond<br>d) Huntsville Spring Branch<br>e) Crow-Sauty Creek Management Area<br>Breast muscle<br>Collected near former DDT manufacturing plant, 7-8/79.<br>Huntsville Spring Branch site nearest plant<br>Juveniles, age 60-140 days<br><br>Alabama (N), Wheeler National Wildlife Refuge<br>Alabama (N), Tennessee River floor plain<br><br>DUCKS; JUVENILES; ALABAMA; MUSCLES; DDE; DDT; BIOACCUMULATION; INDUSTRIAL POLLUTION; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Fleming, W.J.<br>Cromartie, E.<br>1981<br>Pesticides Monitoring Journal 14(4):115-118 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MF 88.4 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 875<br>Body | | GC-EC | 13 | 1.0-9.0 ppm wet wt | 3.15 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 876<br>Body | | GC | 98 | Not given | 200 ppm lipid wt<br>Geometric mean | 8.6% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 877<br>Brain | | GC | 98 | Not given | 1.66 ppm wet wt<br>Geometric mean | 6.7% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; MONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Fish
LEUCISCUS CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 878<br>Muscle | | GC-EC | | 0.006-0.03 ppm | 0.014 +or- 0.002 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research 18:276-280 |
| 879<br>Muscle | | GC-EC | | a) 0.001-0.25 ppm<br>b) 0.004-0.03 ppm | a) 0.026 +or- 0.002 ppm<br>b) 0.037 +or- 0.009 ppm | a) Lake Karadj<br>b) Lake Latian<br>Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research 18:276-280 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Gannet, Norwegian
MORUS BASSANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 880<br>Eggs | | GC | a) 10<br>b) 11<br>c) 14 | a) Not given<br>b) Not given<br>c) Not given | a) 2.1 +or- 1.5 ppm<br>b) 0.66 +or- 0.27 ppm<br>c) 0.43 +or- 0.24 ppm<br>Wet wt | a) 1972<br>b) 1978<br>c) 1979<br>Addled eggs, collected shortly after laying season<br><br>Norway, Nordsjele<br><br>BIRDS; EGGS; NORWAY; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Fisreite, W.<br>Brevik, E.M.<br>Torp, H.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:58-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Gull, laughing
LARUS ATRICILLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 881<br>Eggs | | GC-EC | a) 15<br>b) 11 | a) 0.55-2.57 ug/g<br>b) 0.65-2.20 ug/g<br>Wet wt | a) 1.41 ug/g<br>b) 1.14 ug/g<br>Wet wt<br>Geometric means | a) 1971<br>b) 1975<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Ibis, glossy
PLEGADIS FALCINELLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 882<br>Eggs | | GC-EC | 10 | 0.27-7.70 ug/g wet wt | 1.49 ug/g wet wt<br>Geometric mean | 1972<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Ibis, white
EUDOCIMUS ALBUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 883<br>Eggs | | GC-EC | a) 10<br>b) 10 | a) 0.19-1.46 ug/g<br>b) 0.14-0.88 ug/g<br>Wet wt | a) 0.48 ug/g<br>b) 0.52 ug/g<br>Wet wt<br>Geometric means | a) 1972<br>b) 1974<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Osprey
PANDION HALIAETUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 88a<br>Eggs | | | a) 8<br>b) 7 | a) 29.0-116.9 ppm<br>b) 6.1-27.6 ppm<br>Lipid wt | a) 71.2 +or- 47.3 ppm<br>b) 20.0 +or- 7.4 ppm<br>Lipid wt | a) 1971, shell thickness 0.43-0.59 mm, 2.3-4.8% fat<br>b) 1972, shell thickness 0.42-0.52 mm, 4.4-5.8% fat<br>Normal shell thickness = 0.5 mm<br><br>Gulf of California<br><br>BIRDS; EGGS; CALIFORNIA; MEXICO; CHLORINE ORGANIC COMPOUNDS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Henny, C.J.<br>Anderson, D.W.<br>1979<br>Bulletin of the Southern Academy of Sciences 78(2):89-106 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Oystercatcher, American
HAEMATOPUS PALLIATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 885<br>Body | | GC-EC | a) 1<br>b) 1 | a) Not applicable<br>b) Not applicable | a) 0.40 ug/g<br>b) 0.45 ug/g<br>Wet wt | a) 1971<br>b) 1973<br>Carcass<br>Found dead<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

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Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Oystercatcher, American
HAEMATOPUS PALLIATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 886<br>Brain | | GC-EC | 1 | Not applicable | 0.10 ug/g wet wt | Found dead, 1971<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |
| 887<br>Eggs | | GC-EC | a) 5<br>b) 10<br>c) 13 | a) 0.78-1.10 ug/g<br>b) 0.30-0.74 ug/g<br>c) 0.15-0.45 ug/g<br>Wet wt | a) 0.92 ug/g<br>b) 0.46 ug/g<br>c) 0.26 ug/g<br>Wet wt<br>Geometric means | a) 1971<br>b) 1972<br>c) 1975<br>Shell thickness not significantly different (P<0.05) from pre-1947 acres<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 888<br>Body | | GC-EC | 15 | 1.6-10 ppm wet wt | 4.76 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 889 Body | | GC-EC | 30 | 0.2-4.6 ppm wet wt | 1.07 ppm wet wt Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 890 Body | | GC-EC | 22 | 0.1-0.7 ppm wet wt | 0.25 ppm wet wt Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 891 Muscle | | GC-EC | 14 | Not given | 15 ng/g Median | 505 ng/g maximum value Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G. Carroll, J.H. Randolph, J.C. 1980 Pesticides Monitoring Journal 14(3):102-107 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Trout
OCREGONUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 892<br>Muscle | | GC-EC | | a) 0.007-0.02 ppm<br>b) 0.02-0.02 ppm | a) 0.0135 +or- 0.09 ppm<br>b) 0.02 ppm | a) Lake Karadj<br>b) Lake Latian<br>Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research<br>18:276-280 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Trout, brown
SALMO TRUTTA FARIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 893<br>Muscle | | GC-EC | | a) 0.027-0.03 ppm<br>b) 0.008-0.24 ppm | a) 0.028 +or- 0.009 ppm<br>b) 0.0512 +or- 0.007 ppm | a) Lake Karadj<br>b) Lake Latian<br>Fish collected 2X/season 10/75-1/77 in reservoirs supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Hashemy-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research<br>18:276-280 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Trout, lake
SALVELINUS NAMAYCUSH

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 894<br>Liver | | GC-EC | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 2 | a) 0.3-1.0 ppm<br>b) 0.6-1.0 ppm<br>c) 0.5-1.1 ppm<br>d) 0.8-2.3 ppm<br>e) 1.0-1.5 ppm<br>f) 2.2-2.6 ppm<br>Wet wt | a) 0.8 ppm<br>b) 0.7 ppm<br>c) 0.8 ppm<br>d) 1.4 ppm<br>e) 1.2 ppm<br>f) 2.4 ppm<br>Wet wt | a) Age 6 yr<br>b) Age 7 yr<br>c) Age 8 yr<br>d) Age 9 yr<br>e) Age 10 yr<br>f) Age 12 yr<br>Mean wt 3.2 kg, mean length 70.5 cm<br>Collected 10/78<br><br>New York, Lake Cayuga<br><br>NEW YORK; AGE; LIVER; MUSCLES; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS | Wszolek, P.C.<br>Lisk, D.J.<br>Wachs, T.<br>Youngs, W.D.<br>1979<br>Environmental Science and Technology<br>13(10):1269-1271 |
| 895<br>Muscle | | GC-EC | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 2 | a) 0.9-1.3 ppm<br>b) 1.3-1.8 ppm<br>c) 1.2-2.1 ppm<br>d) 1.6-2.1 ppm<br>e) 2.3-3.2 ppm<br>f) 3.3-3.7 ppm<br>Wet wt | a) 1.1 ppm<br>b) 1.5 ppm<br>c) 1.7 ppm<br>d) 1.9 ppm<br>e) 2.6 ppm<br>f) 3.5 ppm<br>Wet wt | a) Age 6 yr<br>b) Age 7 yr<br>c) Age 8 yr<br>d) Age 9 yr<br>e) Age 10 yr<br>f) Age 12 yr<br>Mean wt 3.2 kg, mean length 70.5 cm<br>Collected 10/78<br><br>New York, Lake Cayuga<br><br>NEW YORK; AGE; LIVER; MUSCLES; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS | Wszolek, P.C.<br>Lisk, D.J.<br>Wachs, T.<br>Youngs, W.D.<br>1979<br>Environmental Science and Technology<br>13(10):1269-1271 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 896<br>Muscle | | GC-EC | | 0.006-0.22 ppm | 0.052 +or- 0.004 ppm | Fish collected 2X/season 10/75-1/77 in Lake Latian, a reservoir supplying Tehran with drinking water. Highest concentrations in summer<br><br>Iran, Tehran<br><br>IRAN; DDE; DDT; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Nasheay-Tonkabony, S.E.<br>Gharibzadeh, M.<br>1979<br>Environmental Research<br>18:276-280 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Turnstone, ruddy
ARENARIA INTERPRES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 897<br>Brain | | GC-EC | | Not applicable | 0.27 ug/g wet wt | Found dead, 1974<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DIT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Turtle, green
CHELONIA MYDAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 898<br>Eggs | | GC | 2 | Not detected-0.005 ppm wet wt | Not given | Eggs from 2 clutches. Collected as they were laid, frozen after 43-52 d incubation. Significant decrease during incubation<br><br>Florida, Merritt Island<br><br>EGGS; TURTLES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS; FLORIDA | Clark, D.R., Jr.<br>Krynitsky, A.J.<br>1980<br>Pesticides Monitoring Journal 14(1):7-10 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Turtle, loggerhead
CARETTA CARETTA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 899<br>Eggs | | GC | 9 | 0.010-0.200 ppm wet wt | 0.047 ppm wet wt<br>Geometric mean | Eggs from 9 clutches. Collected as they were laid, frozen after 43-52 d incubation. Significant decrease during incubation<br><br>Florida, Merritt Island<br><br>EGGS; TURTLES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; DDE; POLYCHLORINATED BIPHENYLS; FLORIDA | Clark, D.R., Jr.<br>Krynitsky, A.J.<br>1980<br>Pesticides Monitoring Journal 14(1):7-10 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.6 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 900<br>Body | | GC-EC | 2 | 1.5-2.4 ppm wet wt | 1.90 ppm wet<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.6 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 901<br>Body | | GC-EC | 17 | 1.7-9.0 ppm wet wt | 4.55 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Gallium
7440-55-3
Ga
AtW 69.72, MP 29.78 C, BP 2403 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 902<br>Liver | | AAS | 1 | a) Not applicable<br>b) Not applicable | a) <0.005 ug/g<br>b) <0.005 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lbs, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Nelt, N.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

(NEXT PAGE)

Gallium
7440-55-3
Ga
AtW 69.72, MP 29.78 C, BP 2403 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 903<br>Muscle | | AAS | 1 | Not applicable | <0.095 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 2? lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MP 102-108 C
Crane, greater sandhill
GRUS CANADENSIS TABIDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 904<br>Blood, plasma | Injection | Microbiological | 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given | a) 16.8 +or- 8.4 ug/ml<br>b) 15.4 +or- 1.9 ug/ml<br>c) 12.4 +or- 2.0 ug/ml<br>d) 3.1 +or- 0.6 ug/ml<br>e) 29.1 ug/ml<br>f) 37.1 ug/ml<br>g) 31.0 ug/ml<br>h) 24.4 ug/ml<br>i) 49.0 ug/ml<br>j) 70.6 ug/ml<br>k) 47.3 ug/ml<br>l) 43.3 ug/ml | a) 15 min after 5 mg/kg<br>b) 1 hr after 5 mg/kg<br>c) 2 hr after 5 mg/kg<br>d) 6 hr after 5 mg/kg<br>e) 15 min after 10 mg/kg<br>f) 1 hr after 10 mg/kg<br>g) 2 hr after 10 mg/kg<br>h) 3 hr after 10 mg/kg<br>i) 15 min after 20 mg/kg<br>j) 1 hr after 20 mg/kg<br>k) 2 hr after 20 mg/kg<br>l) 3 hr after 20 mg/kg<br>Pectoral muscle injection<br>Healthy 2 yr olds, wt 3.6-5.3 kg<br><br>BIRDS; BLOOD PLASMA; ANTIBIOTICS; MARYLAND; WASHINGTON | Custer, R.S.<br>Bush, M.<br>Carpenter, J.W.<br>1979<br>American Journal of Veterinary Research 40(1):893-895 |

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
NP 102-108 C
Pheasant, ring-necked
PHASIANUS COLCHICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 905 Blood, plasma | Injection | Microbiological | 15 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 15.4 +or- 6.2 ug/ml<br>b) 12.7 +or- 3.0 ug/ml<br>c) 4.9 +or- 2.4 ug/ml<br>d) 27.9 +or- 11.7 ug/ml<br>e) 23.3 +or- 9.1 ug/ml<br>f) 11.2 +or- 3.7 ug/ml<br>g) 2.2 +or- 1.7 ug/ml<br>h) 46.6 +or- 26.9 ug/ml<br>i) 42.0 +or- 25.? ug/ml<br>j) 15.8 +or- 5.6 ug/ml<br>k) 6.9 +or- 5.9 ug/ml | a) 15 min after 5 mg/kg<br>b) 1 hr after 5 mg/kg<br>c) 3 hr after 5 mg/kg<br>d) 15 min after 10 mg/kg<br>e) 1 hr after 10 mg/kg<br>f) 3 hr after 10 mg/kg<br>g) 6 hr after 10 mg/kg<br>h) 15 min after 20 mg/kg<br>i) 1 hr after 20 mg/kg<br>j) 3 hr after 20 mg/kg<br>k) 6 hr after 20 mg/kg<br>Pectoral muscle injection<br>Healthy zoo-raised birds, wt 0.9-1.5 kg<br><br>BIRDS; BLOOD PLASMA; ANTIBIOTICS; MARYLAND; WASHINGTON | Custer, R.S.<br>Bush, M.<br>Carpenter, J.W.<br>1979<br>American Journal of Veterinary Research<br>40(1):893-895 |

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
NP 102-108 C
Quail, Japanese
COTURNIX COTURNIX

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 906 Blood, plasma | Injection | Microbiological | 9 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 13.0 +or- 3.2 ug/ml<br>b) 8.6 +or- 1.2 ug/ml<br>c) 3.1 +or- 2.7 ug/ml<br>d) 14.7 +or- 3.5 ug/ml<br>e) 6.2 +or- 2.6 ug/ml<br>f) 8.3 +or- 3.1 ug/ml<br>g) 32.5 +or- 12.8 ug/ml<br>h) 18.1 +or- 2.3 ug/ml<br>i) 5.4 +or- 2.4 ug/ml | a) 15 min after 5 mg/kg<br>b) 1 hr after 5 mg/kg<br>c) 2 hr after 5 mg/kg<br>d) 15 min after 10 mg/kg<br>e) 1 hr after 10 mg/kg<br>f) 2 hr after 10 mg/kg<br>g) 15 min after 20 mg/kg<br>h) 1 hr after 20 mg/kg<br>i) 3 hr after 20 mg/kg<br>Pectoral muscle injection<br>Healthy zoo-raised birds, wt 100-250 g<br><br>BIRDS; BLOOD PLASMA; ANTIBIOTICS; MARYLAND; WASHINGTON | Custer, R.S.<br>Bush, M.<br>Carpenter, J.W.<br>1979<br>American Journal of Veterinary Research<br>40(1):893-895 |

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Mussel, common
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 907<br>Muscle | | AAS | a) 20<br>b) 20<br>c) 20<br>d) 20<br>e) 20<br>f) 20<br>g) 20<br>h) 20<br>i) 20<br>j) 20<br>k) 20<br>l) 20<br>m) 20<br>n) 20<br>o) 20<br>p) 20<br>q) 20<br>r) 20<br>s) 20 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given<br>m) Not given<br>n) Not given<br>o) Not given<br>p) Not given<br>q) Not given<br>r) Not given<br>s) Not given | a) 310 +or- 156 ug/g<br>b) 167 +or- 44 ug/g<br>c) 222 +or- 44 ug/g<br>d) 235 +or- 120 ug/g<br>e) 130 +or- 42 ug/g<br>f) 157 +or- 48 ug/g<br>g) 40 +or- 15 ug/g<br>h) 39 +or- 10 ug/g<br>i) 218 +or- 87 ug/g<br>j) 148 +or- 47 ug/g<br>k) 241 +or- 103 ug/g<br>l) 346 +or- 104 ug/g<br>m) 123 +or- 73 ug/g<br>n) 61 +or- 35 ug/g<br>o) 228 +or- 44 ug/g<br>p) 65 +or- 23 ug/g<br>q) 196 +or- 56 ug/g<br>r) 182 +or- 65 ug/g<br>s) 79 +or- 27 ug/g<br>Dry wt | a) Saygehuk<br>b) Falsterbo Kanal<br>b) Barseback<br>d) Sartorp<br>e) Fortuna<br>f) Viken<br>g) Kullen<br>h) Ripagarden<br>i) Haverdalsstrand<br>j) Hojerup<br>k) Nomade<br>l) Dragor<br>m) Kobenhaven<br>n) Taarback<br>o) Hiverod<br>p) Helsinger<br>q) Gilleleje<br>r) Salthola<br>s) Ven<br>Whole soft parts, composite samples<br>General decrease from south to north, more pronounced on Swedish than on Danish coast. Collected 6/1977<br>Values also for algae at some locations<br><br>Sweden/Denmark, Baltic Sea, Oresund<br><br>MOLLUSKS; BIOACCUMULATION; WATER POLLUTION; CADMIUM; IRON; LEAD; ZINC; BODY; SWEDEN | Phillips, D.J.<br>1979<br>Environmental Pollution 18:31-43 |



Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 908<br>Body | | AAS | | Not given | 140 +or- 10 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 909<br>Gills | | AAS | | Not given | 40 +or- 20 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

(NEXT PAGE)

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 910 Gonads | | AAS | | a) Not given<br>b) Not given | a) 30 +or- 10 ug/g<br>b) 20 +or- 10 ug/g<br>Dry wt | a) Male<br>b) Female<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 911 Heart | | AAS | | Not given | 650 +or- 150 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 912 Hepatopancreas | | AAS | | Not given | 700 +or- 130 ug/g dry wt | 69% of whole animal content<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 913 Intestine | | AAS | | Not given | 10 +or- 1 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 914 Kidney | | AAS | | Not given | 60 +or- 40 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 915<br>Muscle | | AAS | | Not given | 30 +or- 5 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 916<br>Skin | | AAS | | Not given | 30 +or- 10 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 917<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 2072 +or- 868 ug/g<br>b) 1140 +or- 228 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 918<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 1568 +or- 698 ug/g<br>b) 714 +or- 193 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Significantly higher levels at Tsim Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

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Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 919<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 1239 +or- 150 ug/g<br>b) 1276 +or- 302 ug/g<br>Dry wt | a) Tsin Bei Tsai<br>b) Hai Po<br>Viscera<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.H.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 920<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 1911 +or- 89 ug/g<br>b) 1486 +or- 31 ug/g<br>Dry wt | a) Tsin Bei Tsai<br>b) Hai Po<br>Significantly higher levels at Tsin Bei Tsai (P<0.05)<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.H.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 921<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 806 +or- 76 ug/g<br>b) 707 +or- 21 ug/g<br>Dry wt | a) Tsin Bei Tsai<br>b) Hai Po<br>Adductor muscle<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.H.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 922<br>Liver | | AAS | 4 | 0.05-0.19 ppm wet wt | 0.11 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 923<br>Liver | | AAS | 1 | a) 0.43-1.20 ug/g<br>b) Not applicable<br>Wet wt | a) 0.8 +or- 0.10 ug/g<br>b) 1.4 +or- 0.10 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fish, wt 25 kg, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 92M<br>Muscle | | AAS | 1 | 0.32-0.76 ug/g wet wt | 0.5 +or- 0.2 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 925<br>Blood | | AAS | 91 | <0.02-0.24 ppm wet wt | 0.02 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, R.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9: 193-206 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
ECS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 926<br>Bone | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.17-0.34 mg/kg<br>b) 30.00-75.34 mg/kg<br>c) 21.92-58.25 mg/kg | a) 0.24 +or- 0.030 mg/kg<br>b) 51.28 +or- 6.400 mg/kg<br>c) 35.81 +or- 5.610 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Femoral head and rib<br>Reduced levels in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zsudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |
| 927<br>Brain | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.06-0.09 mg/kg<br>b) 0.54-0.89 mg/kg<br>c) 0.28-0.46 mg/kg | a) 0.07 +or- 0.010 mg/kg<br>b) 0.67 +or- 0.109 mg/kg<br>c) 0.37 +or- 0.050 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Cerebral cortex<br>Significantly lower levels ($P < 0.01$) in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zsudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
ECS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 928<br>Heart | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.06-0.07 mg/kg<br>b) 0.17-0.53 mg/kg<br>c) 0.08-0.18 mg/kg | a) 0.06 +or- 0.003 mg/kg<br>b) 0.38 +or- 0.109 mg/kg<br>c) 0.13 +or- 0.030 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Ventricle<br>Reduced levels in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tresors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zsudzki, J.<br>Bell, M.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:168-172 |
| 929<br>Kidney | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.11-0.13 mg/kg<br>b) 26.05-90.36 mg/kg<br>c) 2.84-7.33 mg/kg | a) 0.12 +or- 0.006 mg/kg<br>b) 59.08 +or- 11.780 mg/kg<br>c) 4.98 +or- 0.830 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Significantly lower levels ($P < 0.01$) in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tresors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zsudzki, J.<br>Bell, M.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:168-172 |
| 930<br>Kidney | | AAS | 92 | <0.02-1.83 ppm wet wt | 0.19 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, R.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 931<br>Liver | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.10-0.19 mg/kg<br>b) 13.00-27.68 mg/kg<br>c) 3.06-6.84 mg/kg | a) 0.15 +or- 0.017 mg/kg<br>b) 23.53 +or- 3.390 mg/kg<br>c) 4.91 +or- 0.690 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Significantly lower levels (P < 0.01) in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zaudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |
| 932<br>Liver | | AAS | 85 | <0.02-0.50 ppm wet wt | 0.11 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 933<br>Muscle | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.05-0.07 mg/kg<br>b) 0.11-0.22 mg/kg<br>c) 0.06-0.17 mg/kg | a) 0.06 +or- 0.006 mg/kg<br>b) 0.17 +or- 0.030 mg/kg<br>c) 0.11 +or- 0.030 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Vastus lateralis<br>Reduced levels in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Zaudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 934<br>Muscle | | AAS | 86 | <0.02-0.34 ppm wet wt | 0.02 ppm wet wt<br>Median | Longissimus dorsi<br>Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramasarthy, L.<br>Oehme, F.W.<br>Hayes, R.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 935<br>Nerve | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.04-0.06 mg/kg<br>b) 0.50-0.65 mg/kg<br>c) 0.16-0.22 mg/kg | a) 0.05 +or- 0.006 mg/kg<br>b) 0.59 +or- 0.046 mg/kg<br>c) 0.19 +or- 0.020 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg PB acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Sciatic nerve<br>Significantly lower levels (P < 0.01) in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Kaudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |
| 936<br>Spleen | Ingestion | AAS | a) 3<br>b) 3<br>c) 3 | a) 0.07-0.11 mg/kg<br>b) 0.63-0.87 mg/kg<br>c) 0.16-0.78 mg/kg | a) 0.09 +or- 0.012 mg/kg<br>b) 0.79 +or- 0.080 mg/kg<br>c) 0.46 +or- 0.018 mg/kg | a) Controls<br>b) 5 mg Pb acetate/d/kg for 20 d<br>c) 5 mg Pb acetate/d/kg and 100 mg thiamin hydrochloride/d/calf SC for 20 d<br>Reduced levels in calves receiving Pb and thiamin<br>Holstein-Friesian calves, age 2-3 wk, wt 50 kg<br><br>Tennessee, Knoxville<br><br>Clinical signs of Pb poisoning in group receiving Pb only, 2 deaths. Depression, hyperexcitability, anorexia, pharyngeal paresis, hypoglossal paresis, muscle tremors, muscle weakness, hyperesthesia, ataxia, blindness, grinding of teeth<br><br>70% decrease of d-aminolevulinic acid dehydratase activity in both Pb treated groups<br><br>JUVENILES; CATTLE; NERVES; LEAD; VITAMINS; BIOACCUMULATION; ENZYMES; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; TENNESSEE; LEAD POISONING | Bratton, G.R.<br>Kaudzki, J.<br>Bell, N.C.<br>Warnock, L.G.<br>1981<br>Toxicology and Applied Pharmacology 59:164-172 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 937<br>Hair | | AAS | 10 | 11-13 ug/g wet wt | 12 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 938<br>Kidney | | AAS | 15 | 0.61-1.2 ug/g wet wt | 0.9 ug/g wt wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 939<br>Liver | | AAS | 10 | 0.18-1.6 ug/g wet wt | 0.87 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Duck

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 940<br>Blood | | AAS | a) 8<br>b) 8<br>c) 8 | a) Not given<br>b) Not given<br>c) Not given | a) 3.5 ug/g<br>b) 4.1 ug/g<br>c) 1.4 ug/g | a) Force fed 2x, size 6 (2.3 g) commercial Pb shot 1X/wk for 5 wk<br>b) Force fed 2x, size 6 (2.3 g) commercial Pb shot 1X/wk and 1 mM/kg body wt CaNa2 EDTA for 6 wk<br>c) Controls<br>All animals sacrificed at wk 9<br><br>Anemia after 3rd and 4th treatment wk, then prostration, anorexia, wt loss, nervous system disfunction in both Pb treated groups<br><br>BIRDS; DUCKS; SALT GLAND; ITALY; ADULTS; LEAD POISONING; BLOOD; LEAD; BIOACCUMULATION | Silvieri Buggiani, S.<br>Rindi, S.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 29:152-155 |

(NEXT PAGE)

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Duck

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 981<br>Nasal<br>gland | Ingestion | AAS | a) 8<br>b) 8<br>c) 8 | a) Not given<br>b) Not given<br>c) Not given | a) 10.5 ug/g<br>b) 4.6 ug/g<br>c) 1.3 ug/g<br>Wet wt | a) Force fed 24, size 6 (2.3 g) commercial Pb shot 1X/wk for 5 wk<br>b) Force fed 24, size 6 (2.3 g) commercial Pb shot 1X/wk and 1 mM CaNa2 EDTA/kg body wt for 6 wk<br>c) Controls<br>All animals sacrificed at wk 9<br><br>Anemia after 3rd and 4th treatment wk, then prostration, anorexia, wt loss, nervous system disfunction in both Pb treated groups<br><br>BIRDS; DUCKS; SALT GLAND; ITALY; ADULTS; LEAD POISONING; BLOOD; LEAD; BIOACCUMULATION | Sivieri Baggiani, S.<br>Bindi, S.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:152-155 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 982<br>Liver | | AAS | 10 | 0.05-0.58 ppm wet wt | 0.19 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 983<br>Kidney | Ingestion | | 1 | Not applicable | 10.5 ppm | Three Pb shot and some casting material in stomach<br>Crippled wild juvenile<br><br>Minor soft tissue wound, wing fracture, anorexia, depression. Death 1 1/2 days after surgical removal of shot<br><br>MINNESOTA; CASE HISTORIES; LEAD POISONING; BLOOD; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS; FALCONS; EAGLES | Redig, P.T.<br>Stowe, C.M.<br>Barnes, D.M.<br>Arent, T.D<br>1980<br>Journal of the American Veterinary Medical Association<br>177(9):941-943 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 988<br>Liver | Ingestion | | 1 | Not applicable | 14.9 ppm | Three Pb shot and some casting material in stomach<br>Crippled wild juvenile<br><br>Minor soft tissue wound, wing fracture, anorexia, depression. Death 1 1/2 days after surgical removal of shot<br><br>MINNESOTA; CASE HISTORIES; LEAD POISONING; BLOOD; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS; FALCONS; EAGLES | Redig, P.T.<br>Stowe, C.M.<br>Barnes, D.M.<br>Arent, T.D.<br>1980<br>Journal of the American Veterinary Medical Association<br>177(9):941-943 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Egret, cattle
BUBULCUS IBIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 945<br>Bone | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.48-1.28 ug/g<br>b) 2.12-3.37 ug/g<br>c) 1.64-3.81 ug/g<br>Wet wt | a) 0.90 +or- 0.16 ug/g<br>b) 2.69 +or- 0.27 ug/g<br>c) 2.53 +or- 0.46 ug/g<br>Wet wt | a) Downy young, mean wt 38.25 g<br>b) Prefledglings, mean wt 283.3 g<br>c) Adults, mean wt 378.8 g<br>Higher levels than in soft tissues<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Bed Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 946<br>Brain | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.10-0.38 ug/g<br>b) 0.08-0.39 ug/g<br>c) 0.29-0.72 ug/g<br>Wet wt | a) 0.23 +or- 0.07 ug/g<br>b) 0.27 +or- 0.07 ug/g<br>c) 0.48 +or- 0.09 ug/g<br>Wet wt | a) Downy young, mean wt 38.25 g<br>b) Prefledglings, mean wt 283.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Bed Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Egret, cattle
PUEBLCUS IBIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 947<br>Eggs | | AAS | 10 | a) 0.12-0.35 ug/g<br>b) 0.07-0.21 ug/g | a) 0.25 +or- 0.04 ug/g<br>b) 0.13 +or- 0.02 ug/g | a) Shells<br>b) Contents<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 948<br>Heart | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.13-0.20 ug/g<br>b) 0.13-0.26 ug/g<br>c) 0.12-0.39 ug/g<br>Wet wt | a) 0.17 +or- 0.02 ug/g<br>b) 0.19 +or- 0.03 ug/g<br>c) 0.24 +or- 0.06 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 241.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 949<br>Kidney | | AAS | a) 4<br>b) 4<br>c) 4 | a) <0.01-0.39 ug/g<br>b) 0.11-0.26 ug/g<br>c) 0.11-0.77 ug/g<br>Wet wt | a) 0.17 +or- 0.08 ug/g<br>b) 0.17 +or- 0.05 ug/g<br>c) 0.35 +or- 0.15 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 241.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 950<br>Liver | | AAS | a) 4<br>b) 4<br>c) 4 | a) 0.12-0.41 ug/g<br>b) 0.25-0.47 ug/g<br>c) 0.29-0.51 ug/g<br>Wet wt | a) 0.31 +or- 0.07 ug/g<br>b) 0.35 +or- 0.05 ug/g<br>c) 0.41 +or- 0.05 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 241.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |

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Lead
7439-92-1
Pb
At# 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Egret, cattle
BUBULCUS IBIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 951<br>Muscle | | AAS | a) 4<br>b) 4<br>c) 4 | a) <0.01-0.30 ug/g<br>b) 0.10-0.29 ug/g<br>c) 0.15-0.60 ug/g<br>Wet wt | a) 0.15 +or- 0.07 ug/g<br>b) 0.18 +or- 0.04 ug/g<br>c) 0.29 +or- 0.11 ug/g<br>Wet wt | a) Downy young, mean wt 34.25 g<br>b) Prefledglings, mean wt 241.3 g<br>c) Adults, mean wt 378.8 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:219-224 |

Lead
7439-92-1
Pb
At# 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Falcon, prairie
FALCO MEXICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 952<br>Blood | Ingestion | AAS | 1 | Not applicable | 11.1 ppm | Three Pb shot in stomach<br>Wt 0.72 kg<br><br>Weight loss, lack of vigor, anorexia, depression, breath odor<br><br>Neutropenia, regenerative anemia, hypoproteinemia. Rapid recovery after removal of shot by aspiration and Ca-EDTA and antibiotics therapy<br><br>MINNESOTA; CASE HISTORIES; LEAD POISONING; BLOOD; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS; FALCONS; EAGLES | Redig, P.T.<br>Stowe, C.M.<br>Barnes, D.M.<br>Arent, T.D.<br>1980<br>Journal of the American Veterinary Medical Association<br>177(9):941-943 |
| 953<br>Kidney | Ingestion | AAS | 1 | Not applicable | 78 ppm | Recently fed diet of shotgun-killed pheasants and ducks. Two No. 6 Pb shot in stomach<br>Wt 0.75 kg<br><br>Depression, lime-green feces, breath odor, vomiting, ataxia, blindness, convulsions. Death on 4th day of symptoms.<br><br>Enlarged liver, lime-green lower colon, bone marrow changes<br><br>MINNESOTA; CASE HISTORIES; LEAD POISONING; BLOOD; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS; FALCONS; EAGLES | Redig, P.T.<br>Stowe, C.M.<br>Barnes, D.M.<br>Arent, T.D.<br>1980<br>Journal of the American Veterinary Medical Association<br>177(9):941-943 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Falcon, prairie
FALCO MEXICANUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 958<br>Liver | Ingestion | AAS | 1 | Not applicable | 57 ppm | Recently fed diet of shotgun-killed pheasants and ducks. Two No.8 Pb shot in stomach<br>Wt 0.75 kg<br><br>Depression, lime-green feces, breath odor, vomiting, ataxia, blindness, convulsions. Death on 4th day of symptoms.<br><br>Enlarged liver, lime-green lower colon, bone marrow changes<br><br>MINNESOTA; CASE HISTORIES; LEAD POISONING; BLOOD; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS; FALCONS; EAGLES | Redig, P.T.<br>Stowe, C.M.<br>Barnes, D.M.<br>Arent, T.D.<br>1980<br>Journal of the American Veterinary Medical Association<br>177(9):941-943 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 955<br>Body | | AAS | 2 | Not given | 1.5 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, BP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Heron, Louisiana
HYDRANASSA TRICOLOR

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 956<br>Bone | | AAS | a) 12<br>b) 7<br>c) 9 | a) 0.37-3.16 ug/g<br>b) 1.46-4.59 ug/g<br>c) 1.40-5.99 ug/g<br>Wet wt | a) 1.70 +or- 0.25 ug/g<br>b) 2.91 +or- 0.36 ug/g<br>c) 3.56 +or- 0.48 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Higher levels than in soft tissues<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 957<br>Brain | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.10-0.41 ug/g<br>b) 0.04-0.35 ug/g<br>c) 0.12-3.00 ug/g<br>Wet wt | a) 0.19 +or- 0.03 ug/g<br>b) 0.24 +or- 0.30 ug/g<br>c) 0.55 +or- 0.31 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 958<br>Eggs | | AAS | 10 | a) <0.01-0.68 ug/g<br>b) <0.01-0.12 ug/g | a) 0.18 +or- 0.06 ug/g<br>b) 0.03 +or- 0.02 ug/g | a) Shells<br>b) Contents<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |
| 959<br>Heart | | AAS | a) 12<br>b) 6<br>c) 9 | a) <0.01-0.80 ug/g<br>b) 0.02-0.31 ug/g<br>c) 0.10-0.69 ug/g<br>Wet wt | a) 0.15 +or- 0.03 ug/g<br>b) 0.16 +or- 0.04 ug/g<br>c) 0.27 +or- 0.006 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:211-224 |

(NEXT PAGE)

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Heron, Louisiana
HYDRANASSA TRICOLOR

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 960<br>Kidney | | AAS | a) 12<br>b) 8<br>c) 9 | a) <0.01-0.58 ug/g<br>b) <0.01-0.59 ug/g<br>c) 0.15-0.97 ug/g<br>Wet wt | a) 0.22 +or- 0.05 ug/g<br>b) 0.20 +or- 0.08 ug/g<br>c) 0.48 +or- 0.10 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 961<br>Liver | | AAS | a) 12<br>b) 8<br>c) 9 | a) 0.01-0.63 ug/g<br>b) 0.06-0.53 ug/g<br>c) 0.18-0.68 ug/g<br>Wet wt | a) 0.22 +or- 0.06 ug/g<br>b) 0.27 +or- 0.06 ug/g<br>c) 0.46 +or- 0.06 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |
| 962<br>Muscle | | AAS | a) 12<br>b) 8<br>c) 9 | a) <0.01-0.27 ug/g<br>b) <0.01-0.45 ug/g<br>c) 0.02-0.65 ug/g<br>Wet wt | a) 0.10 +or- 0.03 ug/g<br>b) 0.16 +or- 0.05 ug/g<br>c) 0.28 +or- 0.06 ug/g<br>Wet wt | a) Downy young, mean wt 150 g<br>b) Prefledglings, mean wt 328.4 g<br>c) Adults, mean wt 465 g<br>Significant increase with age (P<0.001)<br>Collected 5-6/79 from breeding colonies<br><br>Texas, Galveston Bay (W), Red Fish Island<br><br>BIRDS; EGGS; JUVENILES; TEXAS; ADULTS; AGE; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; METALS; BIOACCUMULATION | Cheney, M.A.<br>Hacker, C.S.<br>Schroder, G.D.<br>1981<br>Ecotoxicology and Environmental Safety 5:211-224 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Kestrel, American
FALCO SPARVERIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 963<br>Bone | Ingestion | AAS | a) 3<br>b) 3<br>c) 3<br>d) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 28.70 +or- 2.6 ppm<br>b) 4.20 +or- 0.70 ppm<br>c) 7.63 +or- 1.03 ppm<br>d) 4.23 +or- 1.77 ppm<br>Dry wt | a) Direct ingestion of Pb shots for 60 days<br>b) Controls<br>c) Diet of Pb-poisoned mallards for 60 days<br>d) Controls<br>1 yr olds<br><br>Weight loss in treated and control birds. No visible signs of Pb poisoning<br><br>BIRDS; MARYLAND; BONES; LIVER; BIOACCUMULATION; LEAD | Stendell, R.C.<br>1980<br>Journal of Wildlife Management<br>44(2):527-530 |
| 964<br>Liver | Ingestion | AAS | a) 3<br>b) 3<br>c) 3<br>d) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 0.367 +or- 0.129 ppm<br>b) 0.070 +or- 0.040 ppm<br>c) 0.357 +or- 0.012 ppm<br>d) 0.077 +or- 0.043 ppm<br>Wet wt | a) Direct ingestion of Pb shots for 60 days<br>b) Controls<br>c) Diet of Pb-poisoned mallards for 60 days<br>d) Controls<br>1 yr olds<br><br>Weight loss in treated and control birds. No visible signs of Pb poisoning<br><br>BIRDS; MARYLAND; BONES; LIVER; BIOACCUMULATION; LEAD | Stendell, R.C.<br>1980<br>Journal of Wildlife Management<br>44(2):527-530 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 965<br>Body | | AAS | 30 | a) Not given<br>b) Not given | a) < 0.1 ug/g<br>b) 0.9 +or- 1.3 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 5 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (M)<br><br>BARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Mouse, wood
APODEMUS SYLVATICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 966<br>Bone | | AAS | 7 | a) Not given<br>b) Not given | a) 67 ug/g<br>b) 25 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PEAT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |
| 967<br>Kidney | | AAS | 7 | a) Not given<br>b) Not given | a) 9.8 ug/g<br>b) <0.4 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PEAT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |
| 968<br>Liver | | AAS | 7 | a) Not given<br>b) Not given | a) 8.5 +or- 6.7 ug/g<br>b) 3.5 +or- 3.2 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d). Significantly higher levels (P<0.05)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PEAT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |
| 969<br>Pelt | | AAS | 7 | a) Not given<br>b) Not given | a) 10.3 +or- 5.2 ug/g<br>b) <0.4 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d). Significantly higher levels (P<0.01)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PEAT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Mussel, common
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 970<br>Muscle | | AAS | a) 20<br>b) 20<br>c) 20<br>d) 20<br>e) 20<br>f) 20<br>g) 20<br>h) 20<br>i) 20<br>j) 20<br>k) 20<br>l) 20<br>m) 20<br>n) 20<br>o) 20<br>p) 20<br>q) 20<br>r) 20<br>s) 20 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given<br>m) Not given<br>n) Not given<br>o) Not given<br>p) Not given<br>q) Not given<br>r) Not given<br>s) Not given | a) 202 +or- 72 ug/g<br>b) 160 +or- 34 ug/g<br>c) 131 +or- 32 ug/g<br>d) 92 +or- 47 ug/g<br>e) 59 +or- 16 ug/g<br>f) 51 +or- 18 ug/g<br>g) 48 +or- 9 ug/g<br>h) 34 +or- 8 ug/g<br>i) 54 +or- 25 ug/g<br>j) 120 +or- 57 ug/g<br>k) 125 +or- 38 ug/g<br>l) 125 +or- 54 ug/g<br>m) 26 +or- 8 ug/g<br>n) 20 +or- 5 ug/g<br>o) 42 +or- 26 ug/g<br>p) 39 +or- 23 ug/g<br>q) 79 +or- 16 ug/g<br>r) 116 +or- 18 ug/g<br>s) 65 +or- 22 ug/g<br>Dry wt | a) Saygehuk<br>b) Palsterbo Kanal<br>b) Barseback<br>d) Saxtorp<br>e) Fortuna<br>f) Viken<br>g) Kullen<br>h) Ripagarden<br>i) Haverdalsstrand<br>j) Hojerup<br>k) Mosede<br>l) Dragor<br>m) Kobenhaven<br>n) Taarback<br>o) Hiverod<br>p) Helsingor<br>q) Gilleleje<br>r) Salthole<br>s) Ven<br>Whole soft parts, composite samples<br>General decrease from south to north, more pronounced on Swedish than on Danish coast. Collected 6/1977<br>Values also for algae at some locations<br><br>Sweden/Denmark, Baltic Sea, Oresund<br><br>MOLLUSKS; BIOACCUMULATION; WATER POLLUTION; CADMIUM; IRON; LEAD; ZINC; BODY; SWEDEN | Phillips, D.J.<br>1979<br>Environmental Pollution<br>18:31-43 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 971<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 10.0 +or- 4.3 ug/g<br>b) 10.0 +or- 1.8 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 972<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 12.5 +or- 0.3 ug/g<br>b) 12.5 +or- 1.3 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 973<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 15.0 +or- 5.0 ug/g<br>b) 10.8 +or- 1.4 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 974<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 24.1 +or- 11.3 ug/g<br>b) 10.8 +or- 14.4 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |
| 975<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 8.3 +or- 2.9 ug/g<br>b) 5.8 +or- 3.8 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Addector muscle<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research<br>25:302-309 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Quail, Japanese
COTURNIX COTURNIX JAPONICA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 976<br>Bone | Ingestion | AAS | a) 10<br>b) 10<br>c) 10 | a) Not given<br>b) Not given<br>c) Not given | a) 1.3 +or- 0.1 ug/g<br>b) 2.3 +or- 0.7 ug/g<br>c) 11.1 +or- 1.7 ug/g<br>Dry wt | a) Controls<br>b) Shot by lead pellets<br>c) Ingested one No. 8 lead shot<br>Adults<br><br>BIRDS; VIRGINIA; ADULTS; BONES; LIVER; LEAD; BIOACCUMULATION | Kendall, R.J.<br>Scanlon, P.F.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:652-655 |
| 977<br>Liver | Ingestion | AAS | a) 10<br>b) 10<br>c) 10 | a) Not given<br>b) Not given<br>c) Not given | a) 0.26 +or- 0.52 ug/g<br>b) 0.89 +or- 0.13 ug/g<br>c) 11.4 +or- 3.6 ug/g<br>Dry wt | a) Controls<br>b) Shot by lead pellets<br>c) Ingested one No. 8 lead shot<br>Adults<br><br>BIRDS; VIRGINIA; ADULTS; BONES; LIVER; LEAD; BIOACCUMULATION | Kendall, R.J.<br>Scanlon, P.F.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:652-655 |

Lead
7439-92-1
Pb
At# 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Rabbit

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 978<br>Blood | Ingestion | AAS | a) 4<br>b) 3<br>c) 3 | a) Not given<br>b) Not given<br>c) Not given | a) 0.51 +or- 0.10 nmoles/g<br>b) 4.92 +or- 0.11 nmoles/g<br>c) 4.66 +or- 0.32 nmoles/g | a) Controls<br>b) 0.1% Pb acetate for 4 wk<br>c) 0.1% Pb acetate for 5 wk<br>Administered in drinking water<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |
| 979<br>Brain | Ingestion | AAS | 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.43 +or- 0.16 nmoles/g<br>b) 2.81 +or- 0.10 nmoles/g<br>c) 2.41 +or- 0.17 nmoles/g<br>d) 0.50 +or- 0.08 nmoles/g<br>e) 2.86 +or- 0.14 nmoles/g<br>f) 2.31 +or- 0.17 nmoles/g | a) Controls, cerebrum<br>b) 0.1% Pb acetate for 4 wk, cerebrum<br>c) 0.1% Pb acetate for 5 wk, cerebrum<br>d) Controls, cerebellum<br>e) 0.1% Pb acetate for 4 wk, cerebellum<br>f) 0.1% Pb acetate for 5 wk, cerebellum<br>Administered in drinking water<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |
| 980<br>Intestine | Ingestion | AAS | 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.21 +or- 0.06 nmoles/g<br>b) 0.20 nmoles/g<br>c) 0.95 +or- 0.06 nmoles/g<br>d) 0.94 +or- 0.17 nmoles/g<br>e) 2.68 +or- 0.06 nmoles/g | a) Controls, microsomes<br>b) Controls, supernatant<br>c) 0.1% Pb acetate for 4 wk, microsomes<br>d) 0.1% Pb acetate for 5 wk, microsomes<br>e) 0.1% Pb acetate for 5 wk, supernatant<br>Administered in drinking water<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |
| 981<br>Kidney | Ingestion | AAS | 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.38 +or- 0.03 nmoles/g<br>b) 0.23 +or- 0.02 nmoles/g<br>c) 2.39 +or- 0.10 nmoles/g<br>d) 3.81 +or- 0.27 nmoles/g<br>e) 2.52 +or- 0.21 nmoles/g<br>f) 4.72 +or- 0.30 nmoles/g | a) Controls, microsomes<br>b) Controls, supernatant<br>c) 0.1% Pb acetate for 4 wk, microsomes<br>d) 0.1% Pb acetate for 4 wk, supernatant<br>e) 0.1% Pb acetate for 5 wk, microsomes<br>f) 0.1% Pb acetate for 5 wk, supernatant<br>Administered in drinking water<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |

(NEXT PAGE)

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Rabbit

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 982<br>Liver | Ingestion | AAS | 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.20 +or- 0.03 nmoles/g<br>b) 0.26 +or- 0.02 nmoles/g<br>c) 1.77 +or- 0.19 nmoles/g<br>d) 4.00 +or- 0.13 nmoles/g<br>e) 2.67 +or- 0.40 nmoles/g<br>f) 4.78 +or- 0.55 nmoles/g | a) Controls, microsomes<br>b) Controls, supernatant<br>c) 0.1% Pb acetate for 4 wk, microsomes<br>d) 0.1% Pb acetate for 4 wk, supernatant<br>e) 0.1% Pb acetate for 5 wk, microsomes<br>f) 0.1% Pb acetate for 5 wk, supernatant<br>Administered in drinking water<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BICOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |
| 983<br>Nerve | Ingestion | AAS | a) 4<br>b) 3<br>c) 3 | a) Not given<br>b) Not given<br>c) Not given | a) 0.59 +or- 0.20 nmoles/g<br>b) 3.70 +or- 0.20 nmoles/g<br>c)) 6.38 +or- 0.68 nmoles/g | a) Controls<br>b) 0.1% Pb acetate for 4 wk<br>c) 0.1% Pb acetate for 5 wk<br>Administered in drinking water<br>Sciatic nerve<br>White New Zealand rabbits, wt 4.9-5.5 kg<br><br>Decrease of motor nerve conduction velocity<br><br>RABBITS; NERVES; FINLAND; ADULTS; BICOD; BRAIN; INTESTINES; KIDNEYS; LIVER; BIOACCUMULATION; LEAD | Hietanen, E.<br>Kilpio, J.<br>Marhi, M.<br>Savolainen, H.<br>Vainio, H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:337-347 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Rail, sora
PORZANA CAROLINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 984<br>Bone | Ingestion | AAS | a) 11<br>b) 11<br>c) 8 | a) <0.4-19 ppm<br>b) <0.4-42 ppm<br>c) 0.8-127 ppm<br>Dry wt | a) 1.22 ppm<br>b) 3.22 ppm<br>c) 11.2 ppm<br>Dry wt, geometric means | a) With gizzard shot, collected during last 2 weeks of hunting season<br>b) Without gizzard shot, collected during last 2 weeks of hunting season<br>c) With gizzard shot, collected throughout season<br>Femora and fibiae-fibulae of both legs<br>Immature birds, 9-10/76<br><br>Maryland, Patuxent River Marsh<br><br>BIRDS; JUVENILES; BIOACCUMULATION; LEAD; MARYLAND; BONES; LIVER | Stendell, R.C.<br>Artmann, J.W.<br>Martin, E.<br>1980<br>Journal of Wildlife Management<br>44(2):525-527 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Rail, sora
PORZANA CAROLINA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 985<br>Liver | Ingestion | AAS | a) 11<br>b) 12<br>c) 9 | a) <0.1-0.47 ppm<br>b) <0.1-0.82 ppm<br>c) 0.1-17 ppm<br>Wet wt | a) 0.072 ppm<br>b) 0.198 ppm<br>c) 2.86 ppm<br>Wet wt, geometric means | a) With gizzard shot, collected during last 2 weeks of hunting season<br>b) Without gizzard shot, collected during last 2 weeks of hunting season<br>c) With gizzard shot, collected throughout season<br>Immature birds, 9-10/76<br><br>Maryland, Patuxent River Marsh<br><br>BIRDS; JUVENILES; BIOACCUMULATION; LEAD; MARYLAND; BONES; LIVER | Stendell, R.C.<br>Artmann, J.W.<br>Martin, E.<br>1980<br>Journal of Wildlife Management<br>44(2):525-527 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 986<br>Liver | | AAS | 15 | 0.24-2.01 ppm wet wt | 0.93 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 987<br>Liver | | AAS | 16 | 0.05-1.28 ppm wet wt | 0.17 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 988<br>Liver | | AAS | 15 | 0.05-28.5 ppm wet wt | 0.74 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 988<br>Adrenal gland | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.3-0.4 ppm<br>b) 0.2-0.5 ppm<br>Dry wt | a) 0.4 ppm<br>b) 0.4 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; PCBES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hamchek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 990<br>Blood | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.1-0.2 ppm<br>b) 0.2-0.2 ppm<br>Dry wt | a) 0.2 ppm<br>b) 0.2 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; PCBES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hamchek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

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Lead
7439-92-1
Pb
At# 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sheep
CVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 991<br>Bone | Ingestion | NAA<br>AAS | a) 2<br>b) ? | a) 4.3-4.6 ppm<br>b) 4.6-5.5 ppm<br>Dry wt | a) 4.5 ppm<br>b) 5.1 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hamchek, W.N.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 992<br>Brain | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.08-0.11 ppm<br>b) 0.07-0.08 ppm<br>Dry wt | a) 0.10 ppm<br>b) 0.08 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hamchek, W.N.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 993<br>Heart | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.06-0.10 ppm<br>b) 0.06-0.09 ppm<br>Dry wt | a) 0.08 ppm<br>b) 0.08 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep fed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hamchek, W.N.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 994<br>Kidney | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.7-0.8 ppm<br>b) 0.6-0.8 ppm<br>Dry wt | a) 0.8 ppm<br>b) 0.7 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 995<br>Liver | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.5-0.7 ppm<br>b) 0.5-0.7 ppm<br>Dry wt | a) 0.6 ppm<br>b) 0.6 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 996<br>Pancreas | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.3-0.3 ppm<br>b) 0.3-0.3 ppm<br>Dry wt | a) 0.3 ppm<br>b) 0.3 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 997<br>Spleen | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.1-0.2 ppm<br>b) 0.3-0.7 ppm<br>Dry wt | a) 0.2 ppm<br>b) 0.5 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Nanchek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 998<br>Testis | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.1-0.2 ppm<br>b) 0.1-0.2 ppm<br>Dry wt | a) 0.2 ppm<br>b) 0.2 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Nanchek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 999<br>Thyroid gland | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.4-0.8 ppm<br>b) 0.4-0.6 ppm<br>Dry wt | a) 0.6 ppm<br>b) 0.5 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Nanchek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Shrew
SOREX CINEREUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1000<br>Body | | AAS | 65 | a) Not given<br>b) Not given | a) 1.2 ug/g<br>b) 0.9 +or- 0.2 ug/g<br>Wet wt | a) Ladysmith, 2 samples<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Shrew, common
SOREX ARANEUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1001<br>Bone | | AAS | 20 | a) Not given<br>b) Not given | a) 193 ug/g<br>b) 41 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |
| 1002<br>Kidney | | AAS | 20 | a) Not given<br>b) Not given | a) 45.7 ug/g<br>b) 8.6 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |
| 1003<br>Liver | | AAS | 20 | a) Not given<br>b) Not given | a) 17.2 +or- 7.7 ug/g<br>b) <0.4 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d). Significantly higher levels (P<0.01)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7: 145-154 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Shrew, common
SOREX ARANEUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1004<br>Pelt | | AAS | 20 | a) Not given<br>b) Not given | a) 10.3 +or- 7.4 ug/g<br>b) 2.6 +or- 4.8 ug/g<br>Dry wt | a) Roadside site, 6-8 m from highway (35,000 vehicles/d). Significantly higher levels (P<0.05)<br>b) Control site, 1 km from highway<br>Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaniel, K.M.<br>Harrison, R.M.<br>1981<br>Science of the Total Environment 7:145-154 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1005<br>Body | | AAS | 15 | a) Not given<br>b) Not given | a) 9.42 ug/g<br>b) 5.8 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (B)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1006<br>Blood | | AAS | 87 | <0.02-0.25 ppm wet wt | 0.02 ppm wet wt<br>Median | Healthy animals age < 6 mo. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Mayes, R.W.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |

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Lead
7439-92-1
PB
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1007 Kidney | | AAS | 87 | <0.02-1.04 ppm wet wt | 0.06 ppm wet wt Median | Healthy animals age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L. Oehme, F.W. Hayes, E.R. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1008 Liver | | AAS | 90 | <0.02-0.25 ppm wet wt | 0.06 ppm wet wt Median | Healthy animals age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L. Oehme, F.W. Hayes, E.R. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1009 Muscle | | AAS | 92 | <0.02-2.6 ppm wet wt | 0.06 ppm wet wt Median | Longissimus dorsi<br>Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Ramamurthy, L. Oehme, F.W. Hayes, E.R. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |

Lead
7439-92-1
PB
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Tern, sooty
STERNA FUSCATA FUSCATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1010 Brain | | ASV | 10 | Not given | 0.49 +or- 0.09 ppm wet wt | Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L. Harrison, C.S. 1981 Science of the Total Environment 17:51-58 |
| 1011 Eggs | | ASV | 10 | Not given | 0.38 +or- 0.03 ppm wet wt | Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L. Harrison, C.S. 1981 Science of the Total Environment 17:51-58 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Tern, sooty
STERNA FUSCATA FUSCATA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1012 Feathers | | ASV | 10 | Not given | 0.03 +or- 0.02 ppm wet wt | Hawaii, Lisianski Island<br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L. Harrison, C.S. 1981 Science of the Total Environment 17:51-58 |
| 1013 Kidney | | ASV | 10 | Not given | 1.73 +or- 0.20 ppm wet wt | Hawaii, Lisianski Island<br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L. Harrison, C.S. 1981 Science of the Total Environment 17:51-58 |
| 1014 Liver | | ASV | 10 | Not given | 0.03 +or- 0.01 ppm wet wt | Hawaii, Lisianski Island<br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L. Harrison, C.S. 1981 Science of the Total Environment 17:51-58 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Turtle, box
TERRAPENE CAROLINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1015 Blood | | AAS | a) 9<br>b) 8 | a) 2.17-11.59 ug/g<br>b) Not detected-0.22 ug/g<br>Wet wt | a) 6.00 +or- 4.15 ug/g<br>b) 0.11 +or- 0.09 ug/g<br>Wet wt | a) Rural area near lead smelters<br>b) Rural area 5-15 km from industry and main roads<br>Cardiac blood<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br>Missouri, West Virginia<br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; PENIS; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A. Donovan, M.P. Hennigar, J.H. Waalkes, M.P. 1981 Bulletin of Environmental Contamination and Toxicology 27:349-352 |

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Turtle, box
TERRAPENE CAROLINA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1016<br>Bone | | AAS | 8 | a) 25.78-113.04 ug/g<br>b) 21.73-135.86 ug/g<br>c) 2.54-4.51 ug/g<br>d) 2.23 -5.55 ug/g<br>Wet wt | a) 51.83 +or- 41.08 ug/g<br>b) 64.50 +or- 49.45 ug/g<br>c) 3.69 +or- 0.84 ug/g<br>d) 3.80 +or- 1.49 ug/g<br>Wet wt | a) Humerus<br>b) Femur<br>c) Humerus<br>d) Femur<br>a), b) Rural area near lead smelters<br>c), d) Rural area 5-15 km from industry and main roads<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br><br>Missouri, West Virginia<br><br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; FEMUR; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A.<br>Donovan, M.P.<br>Henninger, J.M.<br>Waalkes, M.P.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:349-352 |
| 1017<br>Kidney | | AAS | a) 8<br>b) 8 | a) 8.45-52.28 ug/g<br>b) 0.55-4.83 ug/g<br>Wet wt | a) 24 +or- 19.65 ug/g<br>b) 1.79 +or- 2.04 ug/g<br>Wet wt | a) Rural area near lead smelters<br>b) Rural area 5-15 km from industry and main roads<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br><br>Missouri, West Virginia<br><br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; FEMUR; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A.<br>Donovan, M.P.<br>Henninger, J.M.<br>Waalkes, M.P.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:349-352 |
| 1018<br>Liver | | AAS | a) 4<br>b) 4 | a) 9.12-46.95 ug/g<br>b) 0.63-2.21 ug/g<br>Wet wt | a) 21.60 +or- 17.15 ug/g<br>b) 1.15 +or- 0.72 ug/g<br>Wet wt | a) Rural area near lead smelters<br>b) Rural area 5-15 km from industry and main roads<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br><br>Missouri, West Virginia<br><br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; FEMUR; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A.<br>Donovan, M.P.<br>Henninger, J.M.<br>Waalkes, M.P.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:349-352 |
| 1019<br>Lung | | AAS | a) 4<br>b) 4 | a) 0.10-0.34 ug/g<br>b) Not detected<br>Wet wt | a) 0.20 +or- 0.10 ug/g<br>b) Not detected<br>Wet wt | a) Rural area near lead smelters<br>b) Rural area 5-15 km from industry and main roads<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br><br>Missouri, West Virginia<br><br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; FEMUR; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A.<br>Donovan, M.P.<br>Henninger, J.M.<br>Waalkes, M.P.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:349-352 |
| 1020<br>Skin | | AAS | a) 4<br>b) 4 | a) 0.24-0.47 ug/g<br>b) Not detected-0.16 ug/g<br>Wet wt | a) 0.35 +or- 0.12 ug/g<br>b) 0.07 +or- 0.08 ug/g<br>Wet wt | a) Rural area near lead smelters<br>b) Rural area 5-15 km from industry and main roads<br>Dorsal, caudial, and cranial skin<br>Wt 362-475 g, 10-21 scute rings, 11-24 humeral annuli<br><br>Missouri, West Virginia<br><br>TURTLES; MISSOURI; WEST VIRGINIA; BLOOD; BONES; FEMUR; KIDNEYS; LIVER; LUNGS; SKIN; LEAD; BIOACCUMULATION; RURAL AREAS; SMELTERS | Beresford, W.A.<br>Donovan, M.P.<br>Henninger, J.M.<br>Waalkes, M.P.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:349-352 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vole, bank
CLETHRIONOMYS GLAREOLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1021 Bone | | AAS | 8 | Not given | 38.2 ug/g dry wt | Roadside site, 6-8 m from highway (35,000 vehicles/d) Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M. Harrison, R.M. 1981 Science of the Total Environment 7: 145-154 |
| 1022 Kidney | | AAS | 8 | Not given | 12.1 ug/g dry wt | Roadside site, 6-8 m from highway (35,000 vehicles/d) Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M. Harrison, R.M. 1981 Science of the Total Environment 7: 145-154 |
| 1023 Liver | | AAS | 8 | Not given | 16.5 +or- 9.2 ug/g dry wt | Roadside site, 6-8 m from highway (35,000 vehicles/d) Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M. Harrison, R.M. 1981 Science of the Total Environment 7: 145-154 |
| 1024 Pelt | | AAS | 8 | Not given | 8.0 +or- 7.2 ug/g dry wt | Roadside site, 6-8 m from highway (35,000 vehicles/d) Data also for estimated exposure and uptake from air and diet.<br><br>United Kingdom, Lancaster<br><br>VOLES; SHREWS; WOOD MICE; PELT; UNITED KINGDOM; BONES; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; AUTOMOTIVE; BIOACCUMULATION; LEAD | Chaiel, K.M. Harrison, R.M. 1981 Science of the Total Environment 7: 145-154 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vole, meadow
MICROTUS PENNSYLVANICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1025 Body | | AAS | 40 | a) Not given<br>b) Not given | a) 0.45 ug/g<br>b) 0.7 +or- 0.4 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1026 Body | | AAS | 35 | a) Not given<br>b) Not given | a) 0.48 +or- 0.05 ug/g<br>b) 20 ug/g<br>Wet wt | a) Ladysmith, 5 samples<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1027 Liver | | AAS | 2 | 0.05-0.25 ppm wet wt | 0.11 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1028<br>Liver | | AAS | 13 | 0.05-1.17 ppm wet wt | 0.18 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1029<br>Body | | AAS | | Not given | 5 +or- 0.5 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1030<br>Gills | | AAS | | Not given | 10 +or- 0.5 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1031<br>Gonads | | AAS | | a) Not given<br>b) Not given | a) 9 +or- 0.5 ug/g<br>b) 8.5 +or- 0.5 ug/g Dry wt | a) Male<br>b) Female<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Manganese
7439-96-5
Mn
At# 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1032 Heart | | AAS | | Not given | 13 +or- 3 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1033 Hepatopancreas | | AAS | | Not given | 7 +or- 0.5 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1034 Intestine | | AAS | | Not given | 14 +or- 1 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1035 Kidney | | AAS | | Not given | 20 +or- 1 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1036 Muscle | | AAS | | Not given | 3 +or- 2 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1037<br>Skin | | AAS | | Not given | 7 +or- 1 ug/g dry wt | Mantle<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1038<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 63.7 +or- 17.2 ug/g<br>b) 32.1 +or- 9.6 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture bed<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1039<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 49.5 +or- 6.5 ug/g<br>b) 41.2 +or- 10.9 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture bed<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1040<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 63.7 +or- 17.2 ug/g<br>b) 32.1 +or- 9.6 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Collected summer 1977 from culture bed<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

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Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Oyster, Pacific
CRASSOSTREA GIGAS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1041<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 45.0 +or- 14.5 ug/g<br>b) 36.2 +or- 8.7 ug/g<br>Dry wt | a) Tsim Sei Tsai<br>b) Hai Po<br>Collected summer 1977 from culture bed<br><br>Hong Kong, Deep Bay<br><br>CYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM, COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, T.H.<br>1981<br>Environmental Research 25:302-309 |
| 1042<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 82.5 +or- 2.5 ug/g<br>b) 28.5 +or- 0.8 ug/g<br>Dry wt | a) Tsim Sei Tsai<br>b) Hai Po<br>Adductor muscle<br>Collected summer 1977 from culture bed<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, T.H.<br>1981<br>Environmental Research 25:302-309 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1043<br>Liver | | AAS | 8 | 0.05-0.53 ppm wet wt | 0.22 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bass, largemouth
MICROPTERUS SALMOIDES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1044 Muscle | | GC | | Not applicable | 37.0 ppb wet wt | Fresh, non-retail, 1 sample (4.5% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bass, smallmouth
MICROPTERUS DOLOMIEUI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1045 Muscle | | GC | | Not applicable | 133.0 ppb wet wt | Fresh, non-retail, 1 sample (31.8% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1046 Liver | | AAS | 1 | a) 0.47-0.60 ug/g<br>b) Not applicable<br>Wet wt | a) 0.55 +or- 0.07 ug/g<br>b) 0.40 +or- 0.02 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Significantly higher levels in large lobe<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Holt, S. 1979 Bulletin of Environmental Contamination and Toxicology 23:1-5 |

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Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1047 Muscle | | AAS | 1 | 0.33-0.40 ug/g wet wt | 0.35 +or- 0.03 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; YELLOBIUM | Reit, R.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Pigeye, spot finned
PRIACANTHUS TAYENUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1048 Muscle | | AAS | | a) 31-66 ppb<br>b) 16-46 ppb<br>Wet wt | a) 44 ppb<br>b) 27 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>6 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapiwat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:294-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bluefish
POMATOMUS SALTATRIX

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1049 Muscle | | GC | | Not applicable | 120.9 ppb wet wt | Fresh, retail, 1 sample (31.3% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
At# 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bullhead
ICTALURUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1050 Muscle | | GC | | Not applicable | 72.0 ppb wet wt | Fresh, retail, 1 sample (91.2% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
At# 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bullhead, black
ICTALURUS MELAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1051 Muscle | | AAS | 10 | 0.10-0.34 mg/kg wet wt | 0.17 +or- 0.03 mg/kg wet wt | Collected 1978<br>0.25-1.78 ug/l reservoir water,<br>0.32-0.53 mg/kg sediment<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Mercury
7439-97-6
Hg
At# 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Burbot
LOTA LOTA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1052 Muscle | | AAS | | a) 0.40-1.29 ug/g<br>b) 0.35-0.89 ug/g<br>Wet wt | a) Not given<br>b) Not given | a) Eagle Lake, length 43-64 cm<br>b) Lake St. Froid, length 32-52 cm<br>Collected 1978/79 in remote, oligotrophic lakes<br><br>Maine (ME)<br><br>MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Akielaszek, J.J.<br>Haines, T.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:201-208 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Catfish, giant
NOTUNA THALASSINUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1053<br>Muscle | | AAS | | a) Not applicable<br>b) Not applicable | a) 510 ppb<br>b) 260 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>1 sample<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Catshark, ridge-back
CHILOSYLLIUM INDICUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1054<br>Muscle | | AAS | | a) 81-480 ppb<br>b) 52-190 ppb<br>Wet wt | a) 240 ppb<br>b) 120 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>5 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1055<br>Blood | | AAS | 92 | <0.02-0.03 ppm wet wt | 0.02 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Ochme, F.W.<br>Hayes, R.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9: 193-206 |

(NEXT PAGE)

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1056<br>Kidney | | AAS | 88 | <0.02-0.04 ppm wet wt | 0.02 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1057<br>Liver | | AAS | 90 | <0.02-0.86 ppm wet wt | 0.02 ppm wet wt<br>Median | Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1058<br>Muscle | | AAS | 78 | Not given | 0.02 ppm wet wt<br>Median | Longissimus dorsi<br>Healthy animals, age < 2 yr. Freshly slaughtered in federally inspected meat packing plants<br>1975/76 survey<br><br>United States, midwest<br><br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L.<br>Oehme, F.W.<br>Hayes, H.H.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:193-206 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cobia
RACHYCENTRON CANADUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1059<br>Muscle | | AAS | | a) 99-290 ppb<br>b) 70-180 ppb<br>Wet wt | a) 190 ppb<br>b) 120 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>2 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1060<br>Hair | | AAS | 10 | 0.1-0.25 ug/g wet wt | 0.18 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 1061<br>Kidney | | AAS | 10 | 0.1-0.1 ug/g wet wt | 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 1062<br>Liver | | AAS | 10 | 0.1-0.1 ug/g wet wt | 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Crappie, black
POMOXIS NIGROMACULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1063<br>Muscle | | AAS | 10 | 0.12-0.80 mg/kg wet wt | 0.37 +or- 0.06 mg/kg wet wt | Collected 1974<br>0.25-1.78 ug/l reservoir water,<br>0.32-0.53 mg/kg sediment<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Dolphin
DELPHINUS DELPHIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1064<br>Muscle | | GC | | Not applicable | 290.9 ppb wet wt | Fresh, non-retail, 1 sample (61.6% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1065<br>Eggs | | AAS | 49 | a) 0.07-0.16 ppm<br>b) Not applicable<br>c) Not detected-0.21 ppm<br>d) Not detected-0.34 ppm<br>e) Not detected-0.20 ppm<br>f) 0.08-0.14 ppm<br>g) 0.07-0.09 ppm<br>h) Not detected-0.25 ppm<br>i) Not applicable<br>j) Not detected-0.30 ppm<br>k) Not detected<br>l) Not detected | a) 0.13 +or- 0.03 ppm<br>b) 0.14 ppm<br>c) 0.12 +or- 0.04 ppm<br>d) 0.16 +or- 0.05 ppm<br>e) 0.11 +or- 0.03 ppm<br>f) 0.10 +or- 0.01 ppm<br>g) 0.08 +or- 0.01 ppm<br>h) 0.13 +or- 0.04 ppm<br>i) 0.08 ppm<br>j) 0.09 +or- 0.02 ppm<br>k) Not detected<br>l) Not detected | a) Nova Scotia, 3 clutches<br>b) New Brunswick, 1 clutch<br>c) Quebec, 8 clutches<br>d) Maine, 6 clutches<br>e) New Hampshire, 5 clutches<br>f) Vermont, 8 clutches<br>g) Massachusetts, 2 clutches<br>h) Rhode Island, 5 clutches<br>i) Pennsylvania, 1 clutch<br>j) Delaware, 10 clutches<br>k) Maryland, 2 clutches<br>l) Virginia, 6 clutches<br>1 egg/clutch analyzed<br>Collected 1978<br>Shell thickness 0.347 mm, identical to pre-1946 value<br><br>Canada/United States, Atlantic Flyway<br><br>EGGS; DUCKS; BIRDS; UNITED STATES; BIOACCUMULATION; PESTICIDE RESIDUES; ARSENIC; CHLORINE ORGANIC COMPOUNDS; CHROMIUM; COPPER; DDE; MERCURY; METALS; POLYBROMINATED BIPHENYLS | Haseltine, S.D.<br>Malbora, B.M.<br>Stafford, C.<br>1980<br>Pesticides Monitoring Journal 14(2):53-57 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1066<br>Liver | | AAS | 10 | 0.28-0.78 ppm wet wt | 0.47 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Fish

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1067<br>Muscle | | AAS | a) 85<br>b) 13 | a) 0.05-0.41 mg/kg<br>b) 0.08-0.25 mg/kg<br>Wet wt | a) 0.16 mg/kg<br>b) 0.16 mg/kg<br>Wet wt | a) 1974<br>b) 1975<br>Imported, assorted, frozen fish<br><br>Lebanon<br><br>LEBANON; MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Acra, A.<br>Hamam, S.<br>Raffoul, Z.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:209-212 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Flounder

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1068<br>Muscle | | GC | | Not applicable | 71.6 ppb wet wt | Fresh, retail, 1 sample (35% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Gannet, Norwegian
MORUS BASSANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1069<br>Eggs | | AAS | a) 10<br>b) 11<br>c) 14 | a) Not given<br>b) Not given<br>c) Not given | a) 0.58 +or- 0.12 ppm<br>b) 0.80 +or- 0.09 ppm<br>c) 0.36 +or- 0.11 ppm<br>Wet wt | Addled eggs, collected shortly after laying season<br><br>Norway, Nordmjele<br><br>BIRDS; EGGS; NORWAY; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Fimreite, N.<br>Brevik, E.M.<br>Torp, E.<br>1982<br>Bulletin of Environmental Contamination and Toxicology 28:58-60 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Geese, snow
CHEN C. CAERULESCENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1070<br>Brain | Ingestion | AAS | a) 5<br>b) 1<br>c) 1<br>d) 2 | a) 0.01-0.04 ppm<br>b) Not applicable<br>c) Not applicable<br>d) 0.02-0.14 ppm<br>Wet wt | a) 0.02 ppm<br>b) 0.02 ppm<br>c) 0.01 ppm<br>d) 0.08 ppm<br>Wet wt | a) Dead<br>b) Moribund<br>c) Shot near treated rice fields<br>d) Shot near untreated rice fields<br>1 day-5 weeks after fields planted with aldrin-treated seed were flooded by heavy rains<br>Collected 1972<br>Mostly immature white-phase birds<br><br>Texas, Colorado County, Garwood Prairie<br><br>Withdrawal, bobbing head and chattering bill movement, abnormal nibbling, dull sunken eyes, lack of muscular coordination, unsteady gait, violent body tremors, loud vocalization, paralysis<br><br>BIRDS; TEXAS; BRAIN; MUSCLES; AGRICULTURE; BIOACCUMULATION; PESTICIDE RESIDUES; DIELDRIN | Flickinger, E.L.<br>1979<br>Journal of Wildlife Management 43(1):94-101 |
| 1071<br>Muscle | Ingestion | AAS | a) 3<br>b) 1<br>c) 1<br>d) 2 | a) 0.02-0.04 ppm<br>b) Not applicable<br>c) Not applicable<br>d) 0.02 -0.04 ppm<br>Wet wt | a) 0.03 ppm<br>b) 0.03 ppm<br>c) 0.02 ppm<br>d) 0.03 ppm<br>Wet wt | a) Dead<br>b) Moribund<br>c) Shot near treated rice fields<br>d) Shot near untreated rice fields<br>1 day-5 weeks after fields planted with aldrin-treated seed were flooded by heavy rains<br>Collected 1972<br>Breast muscle<br>Mostly immature white-phase birds<br><br>Texas, Colorado County, Garwood Prairie<br><br>Withdrawal, bobbing head and chattering bill movement, abnormal nibbling, dull sunken eyes, lack of muscular coordination, unsteady gait, violent body tremors, loud vocalization, paralysis<br><br>BIRDS; TEXAS; BRAIN; MUSCLES; AGRICULTURE; BIOACCUMULATION; PESTICIDE RESIDUES; DIELDRIN | Flickinger, E.L.<br>1979<br>Journal of Wildlife Management 43(1):94-101 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Goatfish, blackstripe
UPENEUS TRAGULA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1072<br>Muscle | | AAS | | a) 6-22 ppb<br>b) 5-15 ppb<br>Wet wt | a) 12 ppb<br>b) 6 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>10 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:294-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Grouper, greasy
EPINEPHELUS TAUVINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1073<br>Muscle | | AAS | | a) 69-160 ppb<br>b) 20-55 ppb<br>Wet wt | a) 95 ppb<br>b) 44 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>5 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:294-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1074<br>Body | | AAS | 2 | Not given | < 0.1 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SQUIRRELS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Mercury
7439-97-6
Hg
ATW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Johnfish, silver
JOHNIUS ARGENTALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1075<br>Muscle | | AAS | | a) 13-20 ppb<br>b) 9-13 ppb<br>Wet wt | a) 17 ppb<br>b) 11 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>5 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapiwat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
ATW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Lizardfish, greater
SAURIDA TUMBIL

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1076<br>Muscle | | AAS | | a) 18-37 ppb<br>b) 11-26 ppb<br>Wet wt | a) 27 ppb<br>b) 18 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>10 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapiwat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
ATW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mackerel

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1077<br>Muscle | | AAS | a) 16<br>b) 93 | a) 0.08-0.10 mg/kg<br>b) 0.10-0.17 mg/kg<br>Wet wt | a) 0.09 mg/kg<br>b) 0.12 mg/kg<br>Wet wt | a) 1974<br>b) 1975<br>Imported canned fish including oily liquid but excluding aqueous liquid<br><br>Lebanon<br><br>LEBANON; MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Acra, A.<br>Raffoul, Z.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:209-212 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mackerel, barred Spanish
SCOMBEROMORUS COMMERSONI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1078 Muscle | | AAS | | a) 65-150 ppb<br>b) 40-66 ppb<br>Wet wt | a) 97 ppb<br>b) 54 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>7 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mackerel, takegilled
RASTRELLIGER KANAGURTA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1079 Muscle | | AAS | | a) 15-31 ppb<br>b) 6-16 ppb<br>Wet wt | a) 24 ppb<br>b) 11 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>11 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mackerel, shorttodies
RASTRELLIGER NEGLECTUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1080 Muscle | | AAS | | a) 23-40 ppb<br>b) 9-25 ppb<br>Wet wt | a) 31 ppb<br>b) 18 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>11 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Monocletreae, lattice
SCCLOPSIS CANCELIATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1081 Muscle | | AAS | | a) 21-36 ppb<br>b) 16-22 ppb<br>Wet wt | a) 28 ppb<br>b) 19 ppb<br>det wt | a) Total Hg<br>b) Organic Hg<br>12 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 294-299 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1082 Body | | AAS | 25 | Not given | < 0.1 ug/g wet wt | 5 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>BARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Muskellunge
ESOX MASQUINONGY

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1083 Muscle | | GC | | Not applicable | 35.9 ppb wet wt | Fresh, non-retail, 1 sample (11.5% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10: 305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Osprey
PANDION HALIAETUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1086 Eggs | | | 7 | 0.1-0.9 ppm wet wt | 0.2 +or- 0.2 ppm wet wt | Collected 1972<br>Shell thickness 0.42-0.52 mm (normal value 0.5 mm)<br>Gulf of California<br>EIDDS; EGGS; CALIFORNIA; MEXICO; CHLORINE ORGANIC COMPOUNDS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Henny, C.J.<br>Anderson, D.W.<br>1979<br>Bulletin of the Southern Academy of Sciences 78(2):89-106 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1086 Body | | AAS | 5 | Not given | 9.4 ug/g wet wt | Composite sample<br>Trapped near unnamed Cu-Zn deposit (Crandon)<br>Wisconsin (W)<br>MAMES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Perch

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1086 Muscle | | GC | | Not applicable | 73.1 ppb wet wt | Fresh, non-retail, 1 sample (30.1% of total Hg)<br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Perch, yellow
PERCA FLAVESCENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1087<br>Muscle | | AAS | 10 | 0.11-0.33 mg/kg wet wt | 0.19 +or- 0.02 mg/kg wet wt | Collected 1974<br>0.25-1.78 ng/l reservoir water,<br>0.32-0.53 mg/kg sediment<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Pike, northern
ESOX LUCIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1088<br>Muscle | | GC | | 91.2-126.9 ppb wet wt | 114.4 ppb wet wt | Fresh, non-retail, 3 samples (6% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Pomfret, black
PAPASTROMATEUS NIGER

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1089<br>Muscle | | AAS | | a) 5-61 ppb<br>b) 4-32 ppb<br>Wet wt | a) 30 ppb<br>b) 18 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>9 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Choovaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Runner, rainbow
SALMO GAIRDNERI RICHARDSONI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1090 Muscle | | AAS | | a) 33-58 ppb<br>b) 11-27 ppb<br>Wet wt | a) 42 ppb<br>b) 21 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>5 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapiwat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:294-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Salmon

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1091 Body | | AAS | | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 0.4 ug/g<br>b) 0.2 ug/g<br>c) 0.5 ug/g<br>d) 1.3 ug/g<br>Dry wt | a) Vesterdalsa River, heavily affected by volcanic activity<br>b) Laxa I Adaldal River, affected by volcanic and geothermal activity<br>c) Nordura River, outside volcanic area<br>d) Selfljot River, far outside volcanic area<br>Fries, age 2-4 yr, electrofished 1975-76<br><br>Iceland<br><br>BODY; CADMIUM; MERCURY; SELENIUM; ZINC; BIOACCUMULATION; ICELAND; JUVENILES; VOLCANOES; FISHES | Johannesson, T.<br>Lunde, G.<br>Steinnes, E.<br>1981<br>Acta Pharmacologica et Toxicologica 48:185-189 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1092 Liver | | AAS | 15 | 0.12-5.45 ppm wet wt | 0.67 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Sandpiper, least
CALIDRIS MINUTILLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1093 Liver | | AAS | 16 | 0.11-1.69 ppm wet wt | 0.50 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1094 Liver | | AAS | 15 | 0.20-0.86 ppm wet wt | 0.43 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Shark, mako
ISURUS OXYRINCHUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1095 Muscle | | GC | | Not applicable | 279.1 ppb wet wt | Fresh, retail, 1 sample (19.3% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |
| 1096 Muscle | | AAS | 19 | a) 0.55-5.89 ug/g<br>b) 0.63-5.67 ug/g<br>Wet wt | a) 2.08 ug/g<br>b) 2.15 ug/g<br>Wet wt | a) Acid-permanganate tissue oxidation<br>b) Thermal tissue oxidation<br>Increasing levels with increasing wt and length<br>Collected 1980, wt 15.5-155 kg, partial length 0.9-2.15 m (heads and tails removed)<br><br>South Africa, Natal Coast<br><br>SOUTH AFRICA; MUSCLES; MEASUREMENT METHODS; MERCURY; BIOACCUMULATION; WATER POLLUTION; FISHES | Watling, R.J.<br>McClurg, T.P.<br>Stanton, B.C.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:352-358 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1097<br>Body | | AAS | 10 | Not given | < 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 28-33 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Shrimp, marine
PENAEUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1098<br>Muscle | | AAS | | a) 2-16 ppb<br>b) 1-10 ppb<br>Wet wt | a) 11 ppb<br>b) 6 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>12 samples<br>Collected 1976/77<br>Gulf of Thailand, upper<br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapiwat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Smelt, rainbow
OSMERUS MORDAX

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1099<br>Muscle | | AAS | | 0.28-0.59 ug/g wet wt | Not given | Collected 1978/79 in remote, oligotrophic lake<br>length 18-22 cm<br>Maine (N), Lake St. Froid<br>MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Akielaszek, J.J.<br>Haines, T.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27: 201-208 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Snapper, malabar
LUTJANUS MALABARICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1100 Muscle | | AAS | | a) 46-650 ppb<br>b) 28-280 ppb<br>Wet wt | a) 220 ppb<br>b) 106 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>7 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Snapper, red
LUTJANUS CAMPECHANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1101 Muscle | | GC | | Not applicable | 403.7 ppb wet wt | Fresh, non-retail, 1 sample (29.6% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Spinefoot, whitespotted
SIGANUS ORAMIN

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1102 Muscle | | AAS | | a) 29-35 ppb<br>b) 21-27 ppb<br>Wet wt | a) 32 ppb<br>b) 23 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>9 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Squid
ILLEX sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1103 Muscle | | AAS | | a) 9-27 ppt<br>b) 3-17 ppt<br>Wet wt | a) 14 ppt<br>b) 8 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>15 samples<br>Collected 1967/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Stingray, Dale-edged
DASYATIS ZUGEI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1103 Muscle | | AAS | | a) 10-26 ppb<br>b) 4-39 ppb<br>Wet wt | a) 17 ppb<br>b) 9 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>9 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Sucker, Utah
CATOSTOMUS ARDENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1105 Muscle | | AAS | 35 | 0.10-0.82 mg/kg wet wt | 0.37 +or- 0.36 mg/kg wet wt | Collected 1974<br>0.25-1.78 ug/l reservoir water,<br>0.32-0.53 mg/kg sediment<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(1):35-40 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1106 Blood | | AAS | 80 | <0.02-0.02 ppm wet wt | 0.02 ppm wet wt Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br>United States, midwest<br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L. Oehme, F.W. Hayes, H.H. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1107 Kidney | | AAS | 93 | <0.02-0.04 ppm wet wt | 0.02 ppm wet wt Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br>United States, midwest<br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L. Oehme, F.W. Hayes, H.H. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1108 Liver | | AAS | 93 | <0.02-0.02 ppm wet wt | 0.02 ppm wet wt Median | Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br>United States, midwest<br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L. Oehme, F.W. Hayes, H.H. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |
| 1109 Muscle | | AAS | 82 | <0.02-0.06 ppm wet wt | 0.02 ppm wet wt Median | Longissimus dorsi<br>Healthy animals, age < 6 mo. Freshly slaughtered in federally inspected meat packing plants 1975/76 survey<br>United States, midwest<br>CATTLE; SWINE; KANSAS; BLOOD; KIDNEYS; LIVER; MUSCLES; CADMIUM; LEAD; MERCURY; BIOACCUMULATION | Pennarthy, L. Oehme, F.W. Hayes, H.H. 1980 Archives of Environmental Contamination and Toxicology 9:193-206 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Swordfish
XIPHIAS GLADIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1110 Muscle | | QC | | Not applicable | 39.6 ppb wet wt | Fresh, retail, 1 sample (23.2% of total Hg)<br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tern, sooty
STERNA FUSCATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1111<br>Brain | | NR | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 0.85 +or- 0.05 ppm<br>b) 0.13 +or- 0.18 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1112<br>Eggs | | NR | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 7.93 +or- 0.57 ppm<br>b) 0.15 +or- 0.05 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1113<br>Feathers | | NR | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 5.48 +or- 0.92 ppm<br>b) 0.05 +or- 0.01 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1114<br>Kidney | | NR | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 1.64 +or- 0.17 ppm<br>b) 1.36 +or- 0.19 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1115<br>Liver | | NR | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 1.52 +or- 0.09 ppm<br>b) 1.52 +or- 0.79 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Threadfin, sixtooth
MENIPTERUS HEXODON

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1116<br>Muscle | | AAS | | a) 20-40 ppb<br>b) 14-25 ppb<br>Wet wt | a) 26 ppb<br>b) 18 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>15 samples<br>Collected 1976/77<br>Gulf of Thailand, upper<br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tickletail
PENTAPUS SETOSUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1117<br>Muscle | | AAS | | a) 22-46 ppb<br>b) 9-27 ppb<br>Wet wt | a) 33 ppb<br>b) 14 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>8 samples<br>Collected 1976/77<br>Gulf of Thailand, upper<br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Trevally, barebreast
CARANX GYMNOSTETHOIDS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1118<br>Muscle | | AAS | | a) 19-130 ppb<br>b) 11-56 ppb<br>Wet wt | a) 55 ppb<br>b) 28 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>23 samples<br>Collected 1976/77<br>Gulf of Thailand, upper<br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Trevally, slender
CARANX LEPTOLEPIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1119 Muscle | | AAS | | a) 10-69 ppb<br>b) 8-35 ppb<br>Wet wt | a) 32 ppb<br>b) 20 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>15 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C 100 mm Hg at 260 C
Trevally, torpedo
MEGALOPSIS CORDYLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1120 Muscle | | AAS | | a) 10-26 ppb<br>b) 7-14 ppb<br>Wet wt | a) 18 ppb<br>b) 10 ppb<br>Wet wt | a) Total Hg<br>b) Organic Hg<br>6 samples<br>Collected 1976/77<br><br>Gulf of Thailand, upper<br><br>CRUSTACEANS; THAILAND; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; MERCURY ORGANIC COMPOUNDS | Cheevaparanapivat, V.<br>Menasveta, P.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:291-299 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Trout, brook
SALVELINUS FONTINALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1121 Muscle | | AAS | | a) 0.13-0.23 ug/g<br>b) 0.08-0.58 ug/g<br>c) 0.12-0.21 ug/g<br>Wet wt | a) Not given<br>b) Not given<br>c) Not given | a) Eagle Lake, length 28-34 cm<br>b) St. Froid Lake, length 24-43 cm<br>c) Cliff Lake, length 33-38 cm<br>Collected 1978/79 in remote, oligotrophic lakes<br><br>Maine (ME)<br><br>MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Akielaszek, J.J.<br>Haines, T.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:201-208 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Trout, lake
SALVELINUS NAMAYCUSH

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1122<br>Muscle | | AAS | | a) 0.13-1.11 ug/g<br>b) 0.34-0.84 ug/g<br>c) 0.10-0.23 ug/g<br>Wet wt | a) Not given<br>b) Not given<br>c) Not given | a) Eagle Lake, length 18-69 cm<br>b) St. Froid Lake, length 40-59 cm<br>c) Cliff Lake, length 35-87 cm<br>Collected 1978/79 in remote, oligotrophic lakes<br><br>Maine (N)<br><br>MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Akielaszek, J.J.<br>Haines, T.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:201-208 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1123<br>Muscle | | AAS | a) 16<br>b) 13 | a) 0.05-0.30 mg/kg<br>b) 0.12-1.20 mg/kg<br>Wet wt | a) 0.13 +or- 0.02 mg/kg<br>b) 0.60 +or- 0.08 mg/kg<br>Wet wt | a) Hatchery stock, length < 20 cm<br>b) Carry-over, length > 20 cm<br>Collected 1974. Higher values than residues reported in 1970/71<br>0.25-1.78 ug/l reservoir water, 0.32-0.53 mg/kg sediment<br><br>Idaho, American Falls Reservoir<br><br>SEDIMENTS; IDAHO; MUSCLES; COMPARATIVE EVALUATIONS; CADMIUM; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION | Kent, J.C.<br>Johnson, D.W.<br>1979<br>Pesticides Monitoring Journal 13(3):35-40 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna
THUNNUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1124<br>Muscle | | ASV | 9 | 1.45-4.30 mg/kg wet wt | 2.72 mg/kg wet wt | Total Hg<br>Relative standard deviation < 5%<br>Length 130-165 cm, wt 100-205 kg<br><br>Mediterranean Sea, Sicily<br><br>GERMANY; ITALY; MUSCLES; MEASUREMENT METHODS; MERCURY; MERCURY ORGANIC COMPOUNDS; FISHES | Ahmed, B.<br>Valenta, P.<br>Nurnberg, H.W.<br>1981<br>Mikrochimica Acta 1:171-184 |
| 1125<br>Muscle | | AAS | a) 209<br>b) 89 | a) 0.24-0.49 mg/kg<br>b) 0.25-0.47 mg/kg<br>Wet wt | a) 0.30 mg/kg<br>b) 0.28 mg/kg<br>Wet wt | a) 1978<br>b) 1975<br>Imported canned fish including oily liquid but excluding aqueous liquid<br><br>Lebanon<br><br>LEBANON; MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Acra, A.<br>Hassan, S.<br>Raffoul, Z.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:209-212 |

Mercury
7439-97-6
Hg
ARW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, albacore
THUNNUS ALALUNGA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1126 Muscle | | GC | | a) 22.4-251.8 ppb wet wt<br>b) Not applicable | a) 117.2 ppb<br>b) 224.2 ppb<br>Wet wt | a) Canned, packed in vegetable oil, 7 samples (21.6% of total Hg)<br>b) Fresh, non-retail, 1 sample (53.3% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
ARW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, bluefin
THUNNUS THYNNUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1127 Muscle | | GC | | 176.9-634.7 ppb wet wt | 405.8 ppb wet wt | Canned, packed in vegetable oil, 2 samples (21.3% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
ARW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, skipjack
KATSUWONUS PELAMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1128 Muscle | | GC | | 115.5-306.3 ppb wet wt | 210.9 ppb wet wt | Canned, packed in vegetable oil, 2 samples (51% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, wahoo
ACANTHOCYBIUM SOLANDERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1129 Muscle | | GC | | Not applicable | 433.0 ppb wet wt | Fresh, non-retail, 1 sample (39.7% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, yellowfin
THUNNUS ALBACARES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1130 Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 122.9 ppb<br>b) 342.6 ppb<br>wet wt | a) Canned, packed in vegetable oil, 1 sample (33.1% of total Hg)<br>b) Fresh, non-retail, 1 sample (30.8% of total Hg)<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1131 Body | | AAS | 10 | Not given | < 0.1 ug/g wet wt | 2 composite samples trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>BATS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J. Reagstad, O.J. 1981 Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Walleye
STIZOSTEDION VITREUM VITREUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1132 Muscle | | GC | | Not applicable | 43.8 ppb wet wt | Fresh, non-retail, 1 sample (3.6% of total Hg)<br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Whitefish, lake
COREGONUS CLUPEAFORMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1133 Muscle | | AAS | | 0.30-2.17 ug/g wet wt | Not given | Collected 1978/79 in remote, oligotrophic lake<br>length 25-51 cm<br>Maine (N), Eagle Lake<br>MUSCLES; BIOACCUMULATION; FISHES; MERCURY | Arhelanzek, J.J.<br>Haines, T.A.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:201-208 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Yellowlegs, greater
TRINGA MELANOLEUCOS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1134 Liver | | AAS | 2 | 0.67-1.04 ppm wet wt | 0.83 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br>Texas, Corpus Christi<br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(P-3) mm Hg AT 25 C, 100 mm Hg at 260 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1135 Liver | | AAS | 13 | 0.11-0.73 ppm wet wt | 0.21 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Bass, largemouth
MICROPTERUS SALMOIDES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1136 Muscle | | GC | | Not applicable | 790.6 ppb wet wt | Fresh, non-retail, 1 sample (95.5% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Bass, smallmouth
MICROPTERUS DOLOMIEUI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1137 Muscle | | GC | | Not applicable | 285.7 ppb wet wt | Fresh, non-retail, 1 sample (68.2% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Bluefish
POMATOMUS SALTATRIX

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1138 Muscle | | GC | | Not applicable | 265.5 ppb wet wt | Fresh, retail, 1 sample (68.7% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Bullhead
ICTALURUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1139 Muscle | | GC | | Not applicable | 102.8 ppb wet wt | Fresh, retail, 1 sample (58.8% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Dolphin
CORYPHAENA HIPPURUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1140 Muscle | | GC | | Not applicable | 181.7 ppb wet wt | Fresh, non-retail, 1 sample (38.4% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Flounder

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1141 Muscle | | GC | | Not applicable | 132.0 ppb wet wt | Fresh, retail, 1 sample (65% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Muskellunge
ESOX MASQUINONGY

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1142 Muscle | | GC | | Not applicable | 275.4 ppb wet wt | Fresh, non-retail, 1 sample (88.5% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Perch

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1143 Muscle | | GC | | Not applicable | 169.8 ppb wet wt | Fresh, non-retail, 1 sample (69.9% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Pike, northern
ESOX LUCIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1184 Muscle | | GC | | 1015.7-2681.6 ppb wet wt | 1986.2 ppb wet wt | Fresh, non-retail, 3 samples (94% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Shark, mako
ISURUS OXYRHINCHUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1185 Muscle | | GC | | Not applicable | 1166.1 ppb wet wt | Fresh, retail, 1 sample (80.7% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Snapper, red
LUTJANUS CAMPECHANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1186 Muscle | | GC | | Not applicable | 960.5 ppb wet wt | Fresh, non-retail, 1 sample (70.4% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Swordfish
XIPHIAS GLADIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1147 Muscle | | GC | | Not applicable | 131.2 ppb wet wt | Fresh, retail, 1 sample (76.8% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna
THUNNUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1148 Muscle | | GC-EC | 8 | 1.00-2.94 mg/kg wet wt | 2.32 mg/kg wet wt | Methyl and dimethyl Hg<br>Length 130-165 cm, wt 100-205 kg<br><br>Mediterranean Sea, Sicily<br><br>GERMANY; ITALY; MUSCLES; MEASUREMENT PERIODS; MERCURY; MERCURY ORGANIC COMPOUNDS; FISHES | Ahsed, M. Valenta, P. Nurnberg, H.W. 1981 Mikrochimica Acta 1:171-184 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna, albacore
THUNNUS ALALUNGA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1149 Muscle | | GC | | a) 89.4-1016.0 ppb<br>b) Not applicable<br>Wet wt | a) 508.0 ppb<br>b) 193.6 ppb<br>Wet wt | a) Canned, packed in vegetable oil, 3 samples (70.4% of total Hg)<br>b) Fresh, non-retail, 1 sample (46.7% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna, bluefin
THUNNUS THYNNUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1150 Muscle | | GC | | 585.8-2641.3 ppb wet wt | 1613.4 ppb wet wt | Canned, packed in vegetable oil, 2 samples (78.7% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna, skipjack
EUTHYNNUS PELAMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1151 Muscle | | GC | | 164.1-197.5 ppb wet wt | 180.8 ppb wet wt | Canned, packed in vegetable oil, 2 samples (49% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna, wahoo
ACANTHOCYBIUM SOLANDERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1152 Muscle | | GC | | Not applicable | 658.1 ppb wet wt | Fresh, non-retail, 1 sample (60.3% of total Hg)<br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J. Smith, J.C. 1981 Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Tuna, yellowfin
THUNNUS ALBACARES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1153 Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 248.3 ppb<br>b) 768.2 ppb<br>Wet wt | a) Canned, packed in vegetable oil, 1 sample (66.9% of total Hg)<br>b) Fresh, non-retail, 1 sample (69.2% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Walleye
STIZOSTEDION VITREUM VITREUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1154 Muscle | | GC | | Not applicable | 1175.0 ppb wet wt | Fresh, non-retail, 1 sample (96.8% of total Hg)<br><br>NEW YORK; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Methionine, DL- (8 CI)
DI-Methionine (9 CI)
59-51-8
C5-H11-N-02-S
MW 149.21, MP 281 C (decomp)
Sheep
CVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1155<br>Blood, plasma | Intraruminal | CC | 4 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 3.02 +or- 0.435 umoles/100 ml<br>b) 3.81 +or- 0.467 umoles/100 ml<br>c) 3.20 +or- 0.276 umoles/100 ml<br>d) 2.30 +or- 0.209 umoles/100 ml<br>e) 2.49 +or- 0.401 umoles/100 ml<br>f) 2.71 +or- 0.681 umoles/100 ml<br>g) 3.49 +or- 0.271 umoles/100 ml<br>a) 3.38 +or- 0.415 umoles/100 ml<br>i) 3.62 +or- 0.283 umoles/100 ml<br>j) 4.99 +or- 0.634 umoles/100 ml<br>k) 57.74 +or- 22.259 umoles/100 ml | a) 0 g/day<br>b) 3 g/day<br>c) 6 g/day<br>d) 9 g/day<br>e) 12 g/day<br>f) 15 g/day<br>g) 18 g/day<br>h) 21 g/day<br>i) 24 g/day<br>j) 27 g/day<br>k) 30 g/day<br>Continuous infusions during successive 1 wk periods<br>Plasma free methionine<br>Mature Merino wethers, wt 83 kg<br><br>Decreased dry matter intake at 24 g/day dose. Death of 1 sheep and acute illness of 2 others at 30 g/day dose<br><br>Acute nephrosis, hemolytic anemia, liver and pancreatic changes<br><br>SHEEP; AMINO ACIDS; AUSTRALIA; ADULTS; KIDNEY DISEASES; BLOOD PLASMA; BIOACCUMULATION | Doyle, P.T.<br>Adams, N.R.<br>1980<br>Australian Veterinary Journal 56:331-334 |

Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
PLATICHTHYS STELLATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1156<br>Bile | Injection<br>Ingestion | Radiometry<br>TLC | a) 4<br>b) 4<br>c) 4<br>d) 3<br>e) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.2 +or- 0.2%<br>b) 0.9 +or- 0.4%<br>c) 0.9 +or- 0.4%<br>d) 0.49 +or- 0.04%<br>e) 2.3 +or- 0.09%<br>% of dose | a) 24 hr (86% metabolites)<br>b) 48 hr (97% metabolites)<br>c) 168 hr (98% metabolites)<br>d) 24 hr (93% metabolites)<br>e) 168 hr (99% metabolites)<br>a)-c) Times after force-feeding, d), e) times after IP injection of 56 uCi 1-83-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |

(NEXT PAGE)

Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
PLATICHTHYS STELLATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1157<br>Bile | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 6.2 +or- 2.0<br>pmoles/mg<br>b) 24.7 +or- 6.8<br>pmoles/mg<br>c) 2.42 +or- 0.97<br>pmoles/mg<br>d) 74.5 +or- 35.3<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/uMole) H3-1-naphthalene at 4C.<br>Significantly lower levels at 12 C (previousy reported data)<br>Glucuronides are major metabolites<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1158<br>Blood | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 1.1 +or- 0.4<br>pmoles/mg<br>b) 0.9 +or- 0.2<br>pmoles/mg<br>c) 0.10 +or- 0.03<br>pmoles/mg<br>d) 0.36 +or- 0.09<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/uMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1159<br>Brain | Ingestion | Radiometry<br>TLC | a) 4<br>b) 4 | a) Not given<br>b) Not given | a) 0.04 +or- 0.02%<br>b) 0.003 +or- 0.001%<br>% of dose | a) 24 hr (11% metabolites)<br>b) 168 hr (41% metabolites)<br>Times after force-feeding 56 uCi 1-83-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |
| 1160<br>Brain | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 6.5 +or- 2.0<br>pmoles/mg<br>b) 0.4 +or- 0.1<br>pmoles/mg<br>c) 0.77 +or- 0.29<br>pmoles/mg<br>d) 0.11 +or- 0.04<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/uMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
FLATICHTHYS STELLATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1161<br>Gills | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 2.5 +or- 0.6<br>pmoles/mg<br>b) 0.7 +or- 0.2<br>pmoles/mg<br>c) 0.28 +or- 0.09<br>pmoles/mg<br>d) 0.21 +or- 0.06<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Bichert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1162<br>Intestine | Ingestion | Radiometry<br>TLC | a) 4<br>b) 4 | a) Not given<br>b) Not given | a) 1.5 +or- 0.8%<br>b) 0.19 +or- 0.06%<br>% of dose | a) 24 hr (38% metabolites)<br>b) 168 hr (91% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Traxler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |
| 1163<br>Intestine | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 86.1 +or- 31.2<br>pmoles/mg<br>b) 9.5 +or- 1.4<br>pmoles/mg<br>c) 0.57 +or- 0.16<br>pmoles/mg<br>d) 0.53 +or- 0.17<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Bichert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1164<br>Kidney | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 2.5 +or- 0.6<br>pmoles/mg<br>b) 1.7 +or- 0.5<br>pmoles/mg<br>c) 0.29 +or- 0.07<br>pmoles/mg<br>d) 0.55 +or- 0.18<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Bichert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
PLATICHTHYS STELLATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1165<br>Liver | Injection<br>Ingestion | Radiometry<br>TLC | a) 4<br>b) 4<br>c) 4<br>d) 3<br>e) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.7 +or- 0.5%<br>b) 0.3 +or- 0.5%<br>c) 0.02 +or- 0.01%<br>d) 3.6 +or- 0.4%<br>e) 0.4 +or- 0.1%<br>% of dose | a) 24 hr (15% metabolites)<br>b) 48 hr (24% metabolites)<br>c) 168 hr (8% metabolites)<br>d) 24 hr (3% metabolites)<br>e) 168 hr (24% metabolites)<br>a)-c) Hours after force-feeding, d), e) times after IP injection of 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Traseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |
| 1165<br>Liver | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 35.7 +or- 10.8 pmoles/mg<br>b) 1.2 +or- 0.4 pmoles/mg<br>c) 2.75 +or- 0.82 pmoles/mg<br>d) 0.52 +or- 0.18 pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Dihydrodiol is major metabolite<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1167<br>Mucus | Ingestion | Radiometry | 6 | a) Not given<br>b) Not given | a) 0.4 +or- 0.1 pmoles/mg<br>b) 0.3 +or- 0.1 pmoles/mg<br>Dry wt | a) Naphthalene<br>b) Metabolites<br>24 hr after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1168<br>Muscle | Ingestion | Radiometry<br>TLC | a) 4<br>b) 4 | a) Not given<br>b) Not given | a) 1.3 +or- 0.4%<br>b) 0.09 +or- 0.02%<br>% of dose | a) 24 hr (35% metabolites)<br>b) 168 hr (73% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Traseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
PLATICHTHYS STELLATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1169<br>Muscle | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 1.9 +or- 0.6 pmoles/mg<br>b) 0.4 +or- 0.1 pmoles/mg<br>c) 0.34 +or- 0.11 pmoles/mg<br>d) 0.12 +or- 0.04 pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/uMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Dihydrodiol is major metabolite<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1170<br>Skin | Injection<br>Ingestion | Radiometry<br>TLC | a) 4<br>b) 4<br>c) 4<br>d) 3<br>e) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.4 +or- 0.2%<br>b) 0.11 +or- 0.04%<br>c) 0.02 +or- 0.01%<br>d) 0.38 +or- 0.12%<br>e) 0.06 +or- 0.01%<br>% of dose | a) 24 hr (25% metabolites)<br>b) 48 hr (55% metabolites)<br>c) 168 hr (74% metabolites)<br>d) 24 hr (16% metabolites)<br>e) 168 hr (21% metabolites)<br>a)-c) Times after force-feeding, d), e) times after IP injection of 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |
| 1171<br>Skin | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 1.2 +or- 0.4 pmoles/mg<br>b) 0.2 +or- 0.1 pmoles/mg<br>c) 0.12 +or- 0.02 pmoles/mg<br>d) 0.06 +or- 0.02 pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/uMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |
| 1172<br>Stomach | Ingestion | Radiometry<br>TLC | a) 4<br>b) 4 | a) Not given<br>b) Not given | a) 0.20 +or- 0.10%<br>b) 0.05 +or- 0.02%<br>% of dose | a) 24 hr (36% metabolites)<br>b) 168 hr (95% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Point Pully<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Flounder, starry
PLATICHTHYS STELLATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1173<br>Stomach | Ingestion | Radiometry | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 17.7 +or- 8.9<br>pmoles/mg<br>b) 2.9 +or- 1.4<br>pmoles/mg<br>c) 0.42 +or- 0.11<br>pmoles/mg<br>d) 0.28 +or- 0.08<br>pmoles/mg<br>Dry wt | a) 24 hr<br>b) 24 hr (metabolites)<br>c) 168 hr<br>d) 168 hr (metabolites)<br>Times after force-feeding 56 uCi (198 uCi/mMole) H3-1-naphthalene at 4 C.<br>Significantly lower levels at 12 C (previously reported data)<br>Fish wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>GILLS; MUCUS; NAPHTHALENE; WASHINGTON; BILE; BLOOD; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Richert, W.L.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:203-214 |

Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Sole, rock
LEPIDOPSETTA BILINEATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1174<br>Bile | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 1.7 +or- 0.6%<br>b) 2.2 +or- 1.6%<br>c) 1.4 +or- 0.8%<br>% of dose | a) 24 hr (95% metabolites)<br>b) 48 hr (98% metabolites)<br>168 hr (99% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Troseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |
| 1175<br>Brain | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6 | a) Not given<br>b) Not given | a) 0.06 +or- 0.004%<br>b) 0.01 +or- 0.001%<br>% of dose | a) 24 hr (15% metabolites)<br>b) 168 hr (26% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Troseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Sole, rock
LEPIDOPSETTA BILINEATA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1176<br>Intestine | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6 | a) Not given<br>b) Not given | a) 6.0 +or- 3.2%<br>b) 0.2 +or- 0.05%<br>% of dose | a) 24 hr (37% metabolites)<br>b) 168 hr (35% metabolites)<br>Times after force-feeding 56 uCi<br>1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or-<br>30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC<br>HYDROCARBONS; NAPHTHALENE;<br>WASHINGTON; BILE; BRAIN; INTESTINES;<br>LIVER; MUSCLES; SKIN; STOMACH;<br>BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of<br>Environmental<br>Contamination and<br>Toxicology 8:673-692 |
| 1177<br>Liver | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 1.8 +or- 1.5%<br>b) 0.8 +or- 0.3%<br>c) 0.12 +or- 0.05%<br>% of dose | a) 24 hr (16% metabolites)<br>b) 48 hr (38% metabolites)<br>c) 168 hr (51% metabolites)<br>Times after force-feeding 56 uCi<br>1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or-<br>30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC<br>HYDROCARBONS; NAPHTHALENE;<br>WASHINGTON; BILE; BRAIN; INTESTINES;<br>LIVER; MUSCLES; SKIN; STOMACH;<br>BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of<br>Environmental<br>Contamination and<br>Toxicology 8:673-692 |
| 1178<br>Muscle | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6 | a) Not given<br>b) Not given | a) 3.4 +or- 0.5%<br>b) 0.3 +or- 0.04%<br>% of dose | a) 24 hr (32% metabolites)<br>b) 168 hr (43% metabolites)<br>Times after force-feeding 56 uCi<br>1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or-<br>30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC<br>HYDROCARBONS; NAPHTHALENE;<br>WASHINGTON; BILE; BRAIN; INTESTINES;<br>LIVER; MUSCLES; SKIN; STOMACH;<br>BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of<br>Environmental<br>Contamination and<br>Toxicology 8:673-692 |
| 1179<br>Skin | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 1.0 +or- 0.6%<br>b) 0.5 +or- 0.4%<br>c) 0.08 +or- 0.02%<br>% of dose | a) 24 hr (27% metabolites)<br>b) 48 hr (43% metabolites)<br>c) 168 hr (50% metabolites)<br>Times after force-feeding 56 uCi<br>1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or-<br>30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC<br>HYDROCARBONS; NAPHTHALENE;<br>WASHINGTON; BILE; BRAIN; INTESTINES;<br>LIVER; MUSCLES; SKIN; STOMACH;<br>BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gaur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of<br>Environmental<br>Contamination and<br>Toxicology 8:673-692 |

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Naphthalene
91-20-3
C10-H8
MW 128.16, MP 80.1 C, BP 217.9 C, VP 1 mm Hg at 52.6 C
Sole, rock
LEPIDOPSETTA BILINEATA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1180<br>Stomach | Ingestion | Radiometry<br>TLC | a) 6<br>b) 6 | a) Not given<br>b) Not given | a) 0.03 +or- 0.06%<br>b) 0.03 +or- 0.01%<br>% of dose | a) 24 hr (45% metabolites)<br>b) 168 hr (71% metabolites)<br>Times after force-feeding 56 uCi 1-H3-naphthalene<br>Sexually immature fishes, wt 82 +or- 30 g<br><br>Washington, Columbia River<br><br>JUVENILES; POLYCYCLIC AROMATIC HYDROCARBONS; NAPHTHALENE; WASHINGTON; BILE; BRAIN; INTESTINES; LIVER; MUSCLES; SKIN; STOMACH; BIOACCUMULATION; FISHES; METABOLITES | Varanasi, U.<br>Gmur, D.J.<br>Treseler, P.A.<br>1979<br>Archives of Environmental Contamination and Toxicology 8:673-692 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1181<br>Liver | | AAS | 1 | a) 3.28-4.6 ug/g<br>b) Not applicable<br>Wet wt | a) 2 +or- 2 ug/g<br>b) 0.26 +or- 0.03 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |
| 1182<br>Muscle | | AAS | 1 | 0.47-1.70 ug/g wet wt | 1.0 +or- 0.2 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 24 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1183<br>Hair | | AAS | 10 | 0.65-0.68 ug/g | 0.67 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 1184<br>Kidney | | AAS | 10 | 0.1-0.1 ug/g wet wt | 0.1 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |
| 1185<br>Liver | | AAS | 10 | 0.1-0.11 ug/g wet wt | 0.11 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |



Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Duck, mallard
ANAS PLATYRHYNCHOS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1186<br>Blood | Ingestion | AAS | a) 12<br>b) 12<br>c) 12<br>d) 12<br>e) 11 | a) 0-0.005 ppm<br>b) 0.005 ppm<br>c) 0.005-0.008 ppm<br>d) 0.0156-0.0345 ppm<br>e) 0.0838-0.2299 ppm<br>Wet wt | a) Not applicable<br>b) Not applicable<br>c) 0.007 ppm<br>d) 0.023 ppm<br>e) 0.139 ppm<br>Wet wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 days<br>Breeding pairs, game farm mallards, age 20 wo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>BIRDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |

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Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Duck, mallard
ANAS PLATYRHYNCHOS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1187<br>Bone | Ingestion | AAS | a) 12<br>b) 12<br>c) 12<br>d) 12<br>e) 11 | a) 0.050-0.109 ppm<br>b) 0.050-0.101 ppm<br>c) 0.050-0.112 ppm<br>d) 0.050-0.073 ppm<br>e) 0.050-0.182 ppm<br>Wet wt | a) 0.07 ppm<br>b) 0.07 ppm<br>c) 0.07 ppm<br>d) 0.06 ppm<br>e) 0.09 ppm<br>Wet wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 days<br>Breeding pairs, game farm mallards, age 20 mo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>BIRDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |
| 1188<br>Brain | Ingestion | AAS | a) 12<br>b) 12<br>c) 12<br>d) 12<br>e) 11 | a) 0.048-0.093 ppm<br>b) 0.050-0.122 ppm<br>c) 0-0.05 ppm<br>d) 0.050-0.104 ppm<br>e) 0.060-0.151 ppm<br>Wet wt | a) 0.06 ppm<br>b) 0.07 ppm<br>c) Not applicable<br>d) 0.07 ppm<br>e) 0.10 ppm<br>Wet wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 days<br>Breeding pairs, game farm mallards, age 20 mo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>BIRDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |
| 1189<br>Feathers | Ingestion | AAS | a) 10<br>b) 8<br>c) 7<br>d) 6<br>e) 4 | a) 0.489-1.614 ppm<br>b) 1.531-4.194 ppm<br>c) 1.589-16.849 ppm<br>d) 5.030-29.478 ppm<br>e) 8.300-558.029 ppm<br>Dry wt | a) 0.87 ppm<br>b) 2.53 ppm<br>c) 5.17 ppm<br>d) 12.18 ppm<br>e) 68.06 ppm<br>Dry wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 days<br>New flight feathers (primary and secondary)<br>Breeding pairs, game farm mallards, age 20 mo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>BIRDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |
| 1190<br>Kidney | Ingestion | AAS | a) 12<br>b) 12<br>c) 12<br>d) 12<br>e) 11 | a) 0.063-0.138 ppm<br>b) 0.104-0.238 ppm<br>c) 0.123-0.659 ppm<br>d) 0.604-0.911 ppm<br>e) 1.226-3.077 ppm<br>Wet wt | a) 0.09 ppm<br>b) 0.16 ppm<br>c) 0.39 ppm<br>d) 0.74 ppm<br>e) 1.98 ppm<br>Wet wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 d<br>Significantly higher tissue levels in all Ni amended diets<br>Breeding pairs, game farm mallards, age 20 mo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>BIRDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |

(NEXT PAGE)

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Duck, mallard
ANAS PLATYRHYNCHOS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1191<br>Liver | Ingestion | AAS | a) 12<br>b) 12<br>c) 12<br>d) 12<br>e) 11 | a) 0.060-0.271 ppm<br>b) 0.050-0.194 ppm<br>c) 0.050-0.157 ppm<br>d) 0.125-0.342 ppm<br>e) 0.341-0.788 ppm<br>Wet wt | a) 0.12 ppm<br>b) 0.09 ppm<br>c) 0.08 ppm<br>d) 0.21 ppm<br>e) 0.52 ppm<br>Wet wt<br>Geometric means | a) Controls<br>b) 12.5 ppm<br>c) 50.0 ppm<br>d) 200.0 ppm<br>e) 800.0 ppm<br>NiSO4 levels in diet for 90 days<br>Breeding pairs, game farm mallards, age 20 mo.<br><br>Black tarry feces at higher Ni dose. No effects on egg production, hatchability, survival of ducklings<br><br>EIPDS; FEATHERS; BIOACCUMULATION; NICKEL; BLOOD; BONES; BRAIN; KIDNEYS; LIVER; MARYLAND; ADULTS | Eastin, W.C., Jr.<br>O'Shea, T.J.<br>1981<br>Journal of Toxicology and Environmental Health 7:883-892 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1192<br>Body | | AAS | 2 | Not given | 0.23 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1193<br>Body | | AAS | 30 | a) Not given<br>b) Not given | a) 0.77 ug/g<br>b) 1.0 +or- 0.2 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 5 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1194 Body | | AAS | 5 | Not given | 42 ug/g wet wt | Composite sample Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1195 Kidney | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.3-0.3 ppm<br>b) 0.6-0.8 ppm<br>Dry wt | a) 0.3 ppm<br>b) 0.7 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Maschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 1196 Thyroid gland | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 0.9-1.7 ppm<br>b) 0.5-0.9 ppm<br>Dry wt | a) 1.3 ppm<br>b) 0.7 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Maschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Shrew
SOREX CINEREUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1197<br>Body | | AAS | 45 | a) Not given<br>b) Not given | a) 2.4 ug/g<br>b) 1.5 +or- 0.2 ug/g<br>Wet wt | a) Ladysmith, 2 samples<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (M)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1198<br>Body | | AAS | 15 | a) Not given<br>b) Not given | a) 2.8 ug/g<br>b) 1.2 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (M)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Vole, meadow
MICROTUS PENNSYLVANICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1199<br>Body | | AAS | 40 | a) Not given<br>b) Not given | a) 0.99 ug/g<br>b) 1.7 +or- 0.9 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (M)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1200<br>Body | | AAS | 35 | a) Not given<br>b) Not given | a) 0.93 +or- 0.20 ug/g<br>b) 1.3 ug/g<br>Wet wt | a) Ladysmith, 5 samples<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (M)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Hongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Phenol, pentachloro-
87-86-5
C6-H-Cl5-O
MW 266.35, MP 190-191 C, BP 309-310 C (decomp), VP 40 mm Hg at 211.2 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1201<br>Bile | | MS | 8 | Not given | 416.3 +or- 27.62 ug/ml | 24 hr in 0.5 mg/l at 12C<br>Measured as pentachloroanisole<br><br>WISCONSIN; BILE; LIVER; MUSCLES; MEASUREMENT METHODS; FISHES; CHLORINE ORGANIC COMPOUNDS | Wu, A.<br>Lech, J.J.<br>Glickman, A.<br>Pearson, M.L.<br>1978<br>Journal of the Association of Official Analytical Chemists<br>61:1303-1306 |
| 1202<br>Liver | | MS | 10 | Not given | 16.9 +or- 0.96 ug/g | 24 hr in 0.5 mg/l at 12C<br>Measured as pentachloroanisole<br><br>WISCONSIN; BILE; LIVER; MUSCLES; MEASUREMENT METHODS; FISHES; CHLORINE ORGANIC COMPOUNDS | Wu, A.<br>Lech, J.J.<br>Glickman, A.<br>Pearson, M.L.<br>1978<br>Journal of the Association of Official Analytical Chemists<br>61:1303-1306 |
| 1203<br>Muscle | | MS | 10 | Not given | 1.10 +or- 0.07 ug/g | 24 hr in 0.5 mg/l at 12C<br>Measured as pentachlorcanisole<br><br>WISCONSIN; BILE; LIVER; MUSCLES; MEASUREMENT METHODS; FISHES; CHLORINE ORGANIC COMPOUNDS | Wu, A.<br>Lech, J.J.<br>Glickman, A.<br>Pearson, M.L.<br>1978<br>Journal of the Association of Official Analytical Chemists<br>61:1303-1306 |

Phosphonic acid, methyl-, diisopropyl ester (8 CI)
Phosphonic acid, methyl-, bis(1-methylethyl) ester (9 CI)
1445-75-6
C7-H17-O3-P
MW 180.21
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1204<br>Milk | Ingestion | Radiometry | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 0.06%<br>b) 0.08%<br>c) 0.08%<br>d) 0.08%<br>e) 0.08%<br>Cumulative % of dose | a) 12 hr<br>b) 36 hr<br>c) 48 hr<br>d) 72 hr<br>e) 96 hr<br>Hours after single 3.57 g dose of C14-DIMP (10 mg/kg body wt), preceded by 5 daily 3.57 g unlabeled DIMP doses<br>Lactating Jersey cow, wt 357 kg<br><br>PHOSPHONATES; CATTLE; TEXAS; FECES; MILK; URINE; BIOACCUMULATION; LACTATION; METABOLISM; METABOLITES | Ivie, G.W.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:40-48 |
| 1205<br>Urine | Ingestion | Radiometry | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable | a) 29.7%<br>b) 64.9%<br>c) 74.5%<br>d) 82.3%<br>e) 83.8%<br>f) 84.0%<br>Cumulative % of dose | a) 4 hr<br>b) 8 hr<br>c) 12 hr<br>d) 24 hr<br>e) 72 hr<br>f) 96 hr<br>Hours after single 3.57 g dose of C14-DIMP (10 mg/kg body wt), preceded by 5 daily 3.57 g unlabeled DIMP doses<br>Isopropyl methylphosphonic acid only identified metabolite<br>Lactating Jersey cow, wt 357 kg<br><br>PHOSPHONATES; CATTLE; TEXAS; FECES; MILK; URINE; BIOACCUMULATION; LACTATION; METABOLISM; METABOLITES | Ivie, G.W.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:40-48 |

Phosphoramidic acid, methyl-, 4-tert-butyl-2-chlorophenyl methyl ester (8 CI)
Phosphoramidic acid, methyl-, 2-chloro-4-(1,1-dimethylethyl)phenyl methyl ester (9 CI)
12676-18-1
C12-H19-Cl-N-O3-P
MW 291.71, MP 60-60.5 C, BP 117-118 C at 0.01 mm Hg
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1206<br>Milk | Dermal | GC | 10 | a) 0.07-0.11 mg/kg<br>b) 0.06-0.13 mg/kg<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>Estimated from graph | a) 0.09 mg/kg<br>b) 0.1 mg/kg<br>c) <0.05 mg/kg<br>d) <0.05 mg/kg<br>e) <0.05 mg/kg<br>Estimated from graph | a) 8 hr<br>b) 12 hr<br>c) 22 hr<br>d) 30 hr<br>e) 46 hr<br>Times after spinal application of 47 ml of a 28% preparation<br>0.05 mg/kg maximum permissible level within 24 hr<br>5-6X higher levels in fat fraction of milk<br>Dairy cows at different lactation stages, wt 533-590 kg<br><br>CATTLE; MILK; IRELAND; ORGANOPHOSPHATES; PESTICIDES; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES | O'Keeffe, M.<br>Hades, J.F.<br>Strickland, K.L.<br>Harrington, D.<br>1982<br>Journal of the Science of Food and Agriculture 33:355-360 |

Phosphorothioic acid, O,O-dimethyl O-(4-nitro-m-tolyl) ester (8 CI)
Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-nitrophenyl) ester (9 CI)
122-14-5
C9-H12-N-O5-P-S
MW 277.3, BP 118 C, also reported as 140-145 C (decomp), VP 6X10(E-6) mm Hg at 20 C
Chicken
GALLOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1207<br>Adipose | Ingestion | Radiometry | a) 2<br>b) 3<br>c) 3<br>d) 3 | a) 0.040-0.058 ug/g<br>b) 0.050-0.071 ug/g<br>c) 0.035-0.053 ug/g<br>d) 0.018-0.031 ug/g<br>Wet wt | a) 0.049 ug/g<br>b) 0.060 ug/g<br>c) 0.044 ug/g<br>d) 0.024 ug/g<br>Wet wt | a) 2 X 10 mg/kg body wt during 2 wk, 8 d between 2nd dose and sacrifice<br>b) 4 X 10 mg/kg body wt during 1 mo, 8 d between last dose and sacrifice<br>c) 8 X 10 mg/kg body wt during 2 mo, 8 d between last dose and sacrifice<br>d) 8 X 10 mg/kg body wt during 2 mo, 16 d between last dose and sacrifice<br>Intubation<br>Measured as H3<br>ring-methylfenitrothion<br>Hubbert chickens, wt 500 g<br><br>BIRDS; CHICKENS; CANADA; ADIPOSE TISSUE; BLOOD; BRAIN; LIVER; BIOACCUMULATION; INSECTICIDES; ORGANOPHOSPHATES | Trottier, B.L.<br>Jankowska, I.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:606-610 |
| 1208<br>Blood | Ingestion | Radiometry | a) 2<br>b) 3<br>c) 3<br>d) 3 | a) 0.030-0.044 ug/ml<br>b) 0.026-0.060 ug/ml<br>c) 0.044-0.086 ug/ml<br>d) 0.004-0.011 ug/ml | a) 0.037 ug/ml b) 0.038 ug/ml<br>c) 0.062 ug/ml<br>d) 0.007 ug/ml | a) 2 X 10 mg/kg body wt during 2 wk, 8 d between 2nd dose and sacrifice<br>b) 4 X 10 mg/kg body wt during 1 mo, 8 d between last dose and sacrifice<br>c) 8 X 10 mg/kg body wt during 2 mo, 8 d between last dose and sacrifice<br>d) 8 X 10 mg/kg body wt during 2 mo, 16 d between last dose and sacrifice<br>Intubation<br>Measured as H3<br>ring-methylfenitrothion<br>Hubbert chickens, wt 500 g<br><br>BIRDS; CHICKENS; CANADA; ADIPOSE TISSUE; BLOOD; BRAIN; LIVER; BIOACCUMULATION; INSECTICIDES; ORGANOPHOSPHATES | Trottier, B.L.<br>Jankowska, I.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:606-610 |
| 1209<br>Brain | Ingestion | Radiometry | a) 2<br>b) 3<br>c) 3<br>d) 3 | a) 0.019-0.033 ug/kg<br>b) <0.022-0.031 ug/kg<br>c) 0.037-0.068 ug/kg<br>d) <0.007-0.010 ug/kg<br>Wet wt | a) 0.026 ug/kg<br>b) Not applicable<br>c) 0.054 ug/g<br>d) Not applicable<br>Wet wt | a) 2 X 10 mg/kg body wt for 2 wk, 8 d between 2nd dose and sacrifice<br>b) 4 X 10 mg/kg body wt for 1 mo, 8 d between last dose and sacrifice<br>c) 8 X 10 mg/kg body wt for 2 mo, 8 d between last dose and sacrifice<br>d) 8 X 10 mg/kg body wt for 2 mo, 16 d between last dose and sacrifice<br>Intubation<br>Measured as H3<br>ring-methylfenitrothion<br>Hubbert chickens, wt 500 g<br><br>BIRDS; CHICKENS; CANADA; ADIPOSE TISSUE; BLOOD; BRAIN; LIVER; BIOACCUMULATION; INSECTICIDES; ORGANOPHOSPHATES | Trottier, B.L.<br>Jankowska, I.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:606-610 |
| 1210<br>Liver | Ingestion | Radiometry | a) 2<br>b) 3<br>c) 3<br>d) 3 | a) 0.016-0.037 ug/g<br>b) 0.025-0.030 ug/g<br>c) 0.033-0.060 ug/g<br>d) <0.010-0.012 ug/g<br>Wet wt | a) 0.027 ug/g<br>b) 0.028 ug/g<br>c) 0.047 ug/g<br>d) Not applicable<br>Wet wt | a) 2 X 10 mg/kg body wt during 2 wk, 8 d between 2nd dose and sacrifice<br>b) 4 X 10 mg/kg body wt during 1 mo, 8 d between last dose and sacrifice<br>c) 8 X 10 mg/kg body wt during 2 mo, 8 d between last dose and sacrifice<br>d) 8 X 10 mg/kg body wt during 2 mo, 16 d between last dose and sacrifice<br>Intubation<br>Measured as H3<br>ring-methylfenitrothion<br>Hubbert chickens, wt 500 g<br><br>BIRDS; CHICKENS; CANADA; ADIPOSE TISSUE; BLOOD; BRAIN; LIVER; BIOACCUMULATION; INSECTICIDES; ORGANOPHOSPHATES | Trottier, B.L.<br>Jankowska, I.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:606-610 |

Phthalic acid, bis(2-ethylhexyl) ester (8 CI)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)
117-81-7
C24-H38-O4
MW 390.54
Minnow, sheepshead
CYPRINODON VARIEGATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1211<br>Body | | Radiometry<br>TLC | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1<br>f) 1<br>g) 1<br>h) 1<br>i) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable<br>g) Not applicable<br>h) Not applicable<br>i) Not applicable | a) 21.8%<br>b) 9.0%<br>c) 66.6%<br>d) 2.6%<br>e) 3.9%<br>f) 18.5%<br>g) 13.6%<br>h) 61.0%<br>i) 2.9%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Residue<br>e) Diester<br>f) Monoester<br>g) Phthalic acid<br>h) Unknown metabolites<br>i) Residue<br>a)-d) Metabolites after 24 hr exposure to 100 ppb [C14]di(2-ethylhexyl)phthalate, e)-i) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, bis(2-ethylhexyl) ester (8 CI)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)
117-81-7
C24-H38-O4
MW 390.54
Oyster, American
CRASSOSTREA VIRGINICA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1212<br>Muscle | | Radiometry<br>TLC | a) 2<br>b) 2<br>c) 2<br>d) 2<br>e) 2<br>f) 2<br>g) 2<br>h) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 75.4 +or- 0.6%<br>b) 17.4 +or- 3.5%<br>c) 3.0 +or- 1.6%<br>d) 4.3 +or- 1.3%<br>e) 73.2 +or- 7.7%<br>f) 17.7 +or- 2.0%<br>g) 4.6 +or- 4.0%<br>h) 4.4 +or- 1.7%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Residue<br>e) Diester<br>f) Monoester<br>g) Phthalic acid<br>h) Residue<br>a)-d) Metabolites after 24 hr exposure to 100 ppb [C14]di(2-ethylhexyl)phthalate, e)-h) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, bis(2-ethylhexyl) ester (8 CI)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)
117-81-7
C24-H38-O4
MW 390.5%
Shrimp, brown
FENNEROS AZTECUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1213<br>Body | | Radioassay<br>TLC | a) 2<br>b) 2<br>c) 2<br>d) 2<br>e) 2<br>f) 2<br>g) 2<br>h) 2<br>i) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 45.6 +or- 1.3%<br>b) 5.9 +or- 0.8%<br>c) 18.6 +or- 10.4%<br>d) 22.8 +or- 8.4%<br>e) 7.1 +or- 2.5%<br>f) 54.6 +or- 3.5%<br>g) 9.3 +or- 1.9%<br>h) 28.3 +or- 2.8%<br>i) 5.5 +or- 1.9%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Unknown metabolites<br>e) Residue<br>f) Diester<br>g) Monoester<br>h) Phthalic acid<br>i) Residue<br>a)-e) Metabolites after 24 hr exposure to 100 ppb [C14]di(2-ethylhexyl) phthalate, f)-i) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety 5:202-210 |

Phthalic acid, bis(2-ethylhexyl) ester (8 CI)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9 CI)
117-81-7
C24-H38-O4
MW 390.6, BP 230 C at 5 mm Hg, VP 1.2 mm Hg at 200 C
Starling
STURNUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1214<br>Body | Ingestion | GC | a) 8<br>b) 8<br>c) 8<br>d) 8 | a) Not detected<br>b) Not given<br>c) Not given<br>d) Not given | a) Not detected<br>b) 1.6 ppm<br>c) 1.8 +or- 0.31 ppm<br>d) 1.3 +or- 0.25 ppm | a) Controls<br>b) 25 ppm for 30 days, 1 of 8 birds<br>c) 250 ppm for 30 days, 5 of 8 birds<br>d) 250 ppm for 30 days and 14 days of DEHP-free diet, 5 of 8 birds<br>Carcass<br>Adults, captured winter 1977/78<br><br>Significantly greater weight gain and lipid content in treated birds<br><br>BIRDS; PHTHALATES; MARYLAND; ADULTS; BODY; INDUSTRIAL POLLUTION | O'Shea, T.J.<br>Stafford, C.J.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:345-352 |

Phthalic acid, dibutyl ester (8 CI)
1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)
84-74-2
C16-H22-O4
MW 278.34, BP 340 C
Minnow, sheepshead
CYPRINODON VARIEGATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1215<br>Body | | Radiometry<br>TLC | a) 1<br>b) 1<br>c) 1<br>d) | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 13.0%<br>b) 28.2%<br>c) 47.8%<br>d) 11.0%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Residue<br>Metabolites after 24 hr exposure to 100 ppb [C14]-dibutylphthalate<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Glas, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, dibutyl ester (8 CI)
1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)
84-74-2
C16-H22-O4
MW 278.34, BP 340 C
Oyster, American
CRASSOSTREA VIRGINICA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1216<br>Muscle | | Radiometry<br>TLC | a) 2<br>b) 2<br>c) 2<br>d) 2<br>e) 2<br>f) 2<br>g) 2<br>h) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 61.7 +or- 3.5%<br>b) 32.2 +or- 2.3%<br>c) 4.0 +or- 1.2%<br>d) 2.1 +or- 0.0%<br>e) 67.8 +or- 2.8%<br>f) 29.4 +or- 2.5%<br>g) 2.1 +or- 0.3%<br>h) 0.7 +or- 0.1%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Residue<br>e) Diester<br>f) Monoester<br>g) Phthalic acid<br>h) Residue<br>a)-d) Metabolites after 24 hr exposure to 100 ppb [C14]-dibutylphthalate, e)-h) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Glas, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, dibutyl ester (8 CI)
1,2-Benzenedicarboxylic acid, dibutyl ester (9 CI)
84-74-2
C16-H22-O4
MW 278.34, BP 340 C
Shrimp, brown
PENAEUS AZTECUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1217<br>Body | | Radiometry<br>TLC | a) 2<br>b) 2<br>c) 2<br>d) 2<br>e) 2<br>f) 2<br>g) 2<br>h) 2<br>i) 2<br>j) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 3.6 +or- 2.0%<br>b) 21.2 +or- 14.1%<br>c) 26.8 +or- 9.0%<br>d) 41.2 +or- 12.8%<br>e) 7.6 +or- 8.2%<br>f) 9.8 +or- 9.8%<br>g) 17.0 +or- 9.8%<br>h) 14.6 +or- 3.8%<br>i) 48.5 +or- 23.5%<br>j) 10.0 +or- 0.1%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Unknown metabolites<br>e) Residue<br>f) Diester<br>g) Monoester<br>h) Phthalic acid<br>i) Unknown metabolite<br>j) Residue<br>a)-e) Metabolites after 24 hr exposure to 100 ppb [C14]-dibutylphthalate, f)-j) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, dimethyl ester (8 CI)
1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)
131-11-3
C10-H10-O4
MW 194.18, MP 0-2 C, BP 283.7 C, VP 1 mm Hg at 100.3 C
Minnow, sheepshead
CYPRINODON VARIEGATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1218<br>Body | | Radiometry<br>TLC | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1<br>f) 1<br>g) 1<br>h) 1<br>i) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable<br>g) Not applicable<br>h) Not applicable<br>i) Not applicable | a) 14.0%<br>b) 22.3%<br>c) 25.1%<br>d) 34.0%<br>e) 4.5%<br>f) 4.3%<br>g) 4.0%<br>h) 83.1%<br>i) 8.6%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Unknown metabolites<br>e) Residue<br>f) Diester<br>g) Monoester<br>h) Phthalic acid<br>i) Residuum<br>a)-e) Metabolites after 24 hr exposure to 100 ppb [C14]dimethylphthalate, f)-i) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Phthalic acid, dimethyl ester (9 CI)
1,2-Benzenedicarboxylic acid, dimethyl ester (9 CI)
131-11-3
C10-H10-04
MW 194.18, MP 0-2 C, BP 283.7 C, VP 1 mm Hg at 100.3 C
Shrimp, brown
PENAPUS AZTECUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1219<br>Poly | | Radiometry<br>TLC | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1<br>f) 1<br>g) 1<br>h) 1<br>i) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable<br>g) Not applicable<br>h) Not applicable<br>i) Not applicable | a) 44.1%<br>b) 25.7%<br>c) 6.6%<br>d) 13.6%<br>e) 10.0%<br>f) 70.4%<br>g) 1.0%<br>h) 23.3%<br>i) 5.3%<br>% of total radioactivity | a) Diester<br>b) Monoester<br>c) Phthalic acid<br>d) Unknown metabolites<br>e) Residue<br>f) Diester<br>g) Monoester<br>h) Phthalic acid<br>i) Unknown metabolites<br>a)-d) Metabolites after 24 hr exposure to 100 ppb [C14]dimethylphthalate, e)-i) to 500 ppb<br><br>Texas, Galveston, Galveston Bay<br><br>MOLLUSKS; OYSTERS; CRUSTACEANS; SHRIMP; PHTHALATE ESTERS; TEXAS; BODY; MUSCLES; BIOACCUMULATION; FISHES; METABOLISM; METABOLITES | Wofford, H.W.<br>Wilsey, C.D.<br>Neff, G.S.<br>Giam, C.S.<br>Neff, J.M.<br>1981<br>Ecotoxicology and Environmental Safety<br>5:202-210 |

Polybrominated biphenyls (No postings in CHEMLINE).
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1220<br>Adipose | Ingestion | GC-EC | a) 4<br>b) 2<br>c) 4<br>b) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 0.1 +or- 0.1 ug/g<br>b) 15.2 +or- 5.9 ug/g<br>c) 96.3 +or- 24.0 ug/g<br>d) 194.2 +or- 32.8 ug/g<br>Wet wt | a) 0 mg/kg feed<br>b) 10 mg/kg feed<br>c) 100 mg/kg feed<br>d) 200 mg/kg feed<br>Sows (wt 2.00 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation. Killed 4 wk after parturition<br><br>Swollen liver, liver fatty change and centrolobular necrosis<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |

(NEXT PAGE)

Polybrominated Biphenyls (No postings in CHEMLINE).
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1221<br>Adipose | | GC-EC | a) 7<br>b) 14<br>c) 7<br>d) 24<br>e) 12<br>f) 19<br>g) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given | a) 0.4 +or- 0.1 ug/g<br>b) 4.9 +or- 1.4 ug/g<br>c) 40.3 +or- 21.8 ug/g<br>d) 0.2 +or- 0.2 ug/g<br>e) 14.8 +or- 0.3 ug/g<br>f) 96.7 +or- 7.9 ug/g<br>g) 225.2 +or- 49.1 ug/g<br>Wet wt | a) Newborns (sows on 10 mg/kg feed)<br>b) Newborns (sows on 100 mg/kg feed)<br>c) Newborns (sows on 200 mg/kg feed)<br>d) 4 wk olds (sows on 0 mg/kg feed)<br>e) 4 wk olds (sows on 10 mg/kg feed)<br>f) 4 wk olds (sows on 100 mg/kg feed)<br>g) 4 wk olds (sows on 200 mg/kg feed)<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation<br><br>Thyroid: Increased wt, slight hyperplasia, scant, vacuolated colloid in newborns. Liver: Increased wt, fatty changes, centrolobular necrosis in 4 wk olds. Increased mortality in PBB exposed pigs<br><br>At 10 mg/kg increased serum concentration of alkaline phosphatase, alanine aminotransferase, and thyroid hormones, but decreased levels at 100 or 200 mg/kg<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |
| 1222<br>Brain | Ingestion | GC-EC | a) 2<br>b) 4<br>c) 2 | a) Not given<br>b) Not given<br>c) Not given | a) 0.2 +or- 0.0 ug/g<br>b) 1.7 +or- 0.1 ug/g<br>c) 2.7 +or- 0.6 ug/g<br>Wet wt | a) 10 mg/kg feed<br>b) 100 mg/kg feed<br>c) 200 mg/kg feed<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation. Killed 4 wk after parturition<br><br>Swollen liver, liver fatty change and centrolobular necrosis<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |
| 1223<br>Brain | | GC-EC | a) 7<br>b) 8 | a) Not given<br>b) Not given | a) 1.8 +or- 0.6 ug/g<br>b) 4.2 +or- 1.0 ug/g<br>Wet wt | a) Newborns (sows on 200 mg/kg feed)<br>b) 4 wk olds (sows on 200 mg/kg feed)<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation<br><br>Thyroid: Increased wt, slight hyperplasia, scant, vacuolated colloid in newborns. Liver: Increased wt, fatty changes, centrolobular necrosis in 4 wk olds. Increased mortality in PBB exposed pigs<br><br>At 10 mg/kg increased serum concentration of alkaline phosphatase, alanine aminotransferase, and thyroid hormones, but decreased levels at 100 or 200 mg/kg<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |

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Polybrominated biphenyls (No postings in CHEMLINE).
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1224<br>Kidney | Ingestion | GC-EC | a) 2<br>b) 4<br>c) 2 | a) Not given<br>b) Not given<br>c) Not given | a) 0.6 +or- 0.2 ug/g<br>b) 2.3 +or- 0.5 ug/g<br>c) 3.7 +or- 0.5 ug/g<br>Wet wt | a) 10 ug/kg feed<br>b) 100 ug/kg feed<br>c) 200 ug/kg feed<br>Sows (wt 200 kg) fed 2.5 kg/day PBP amended rations during 2nd half of gestation and during lactation. Killed 4 wk after parturition<br><br>Swollen liver, liver fatty change and centrolobular necrosis<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |
| 1225<br>Kidney | | GC-EC | a) 7<br>b) 8 | a) Not given<br>b) Not given | a) 1.5 ug/g<br>b) 4.1 +or- 0.9 ug/g<br>Wet wt | a) Newborns (sows on 200 ug/kg feed)<br>b) 4 wk olds (sows on 200 ug/kg feed)<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation<br><br>Thyroid: Increased wt, slight hyperplasia, scant, vacuolated colloid in newborns. Liver: Increased wt, fatty changes, centrolobular necrosis in 4 wk olds. Increased mortality in PBB exposed pigs<br><br>At 10 ug/kg increased serum concentration of alkaline phosphatase, alanine aminotransferase, and thyroid hormones, but decreased levels at 100 or 200 ug/kg<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |
| 1226<br>Liver | Ingestion | GC-EC | a) 2<br>b) 4<br>c) 2 | a) Not given<br>b) Not given<br>c) Not given | a) 1.0 +or- 0.5 ug/g<br>b) 45.0 +or- 7.8 ug/g<br>c) 92.6 +or- 34.3 ug/g<br>Wet wt | a) 10 ug/kg feed<br>b) 100 ug/kg feed<br>c) 200 ug/kg feed<br>Sows (wt 200 kg) fed 2.5 kg/day PBP amended rations during 2nd half of gestation and during lactation. Killed 4 wk after parturition<br><br>Swollen liver, liver fatty change and centrolobular necrosis<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.R.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |

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Polybrominated biphenyls (No postings in CHEMLINE).
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1227<br>Liver | | GC-EC | a) 7<br>b) 14<br>c) 7<br>d) 12<br>e) 19<br>f) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 1.0 +or- 0.1 ug/g<br>b) 11.5 +or- 1.0 ug/g<br>c) 24.2 +or- 10.3 ug/g<br>d) 2.4 +or- 0.8 ug/g<br>e) 30.2 +or- 2.2 ug/g<br>f) 41.3 +or- 10.1 ug/g<br>Wet wt | a) Newborns (sows on 10 mg/kg feed)<br>b) Newborns (sows on 100 mg/kg feed)<br>c) Newborns (sows on 200 mg/kg feed)<br>d) 4 wk olds (sows on 10 mg/kg feed)<br>e) 4 wk olds (sows on 100 mg/kg feed)<br>f) 4 wk olds (sows on 200 mg/kg feed)<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation<br><br>Thyroid: Increased wt, slight hyperplasia, scant, vacuolated colloid in newborns. Liver: Increased wt, fatty changes, centrolobular necrosis in 4 wk olds. Increased mortality in PBB exposed pigs<br><br>At 10 mg/kg increased serum concentration of alkaline phosphatase, alanine aminotransferase, and thyroid hormones, but decreased levels at 100 or 200 mg/kg<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.E.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |
| 1228<br>Milk | Ingestion | GC-EC | 12 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 1 ug/ml<br>b) 26 ug/ml<br>c) 19 ug/ml<br>d) 2 ug/ml<br>e) 41 ug/ml<br>f) 30 ug/ml<br>g) 1 ug/ml<br>h) 12 ug/ml<br>i) 22 ug/ml | a) Colostrum, 10 mg/kg feed<br>b) Colostrum, 100 mg/kg feed<br>c) Colostrum, 200 mg/kg feed<br>d) Week 1, 10 mg/kg feed<br>e) Week 1, 100 mg/kg feed<br>f) Week 1, 200 mg/kg feed<br>g) Week 4, 10 mg/kg feed<br>h) Week 4, 100 mg/kg feed<br>i) Week 4, 200 mg/kg feed<br>Sows (wt 200 kg) fed 2.5 kg/day PBB amended rations during 2nd half of gestation and during lactation<br><br>Swollen liver, liver fatty change and centrolobular necrosis<br><br>SWINE; MICHIGAN; ADULTS; NEWBORN; LIVER DISEASES; ADIPOSE TISSUE; BRAIN; KIDNEYS; LIVER; MILK; POLYBROMINATED BIPHENYLS; BIOACCUMULATION; LACTATION; PREGNANCY | Werner, P.E.<br>Sleight, S.D.<br>1981<br>American Journal of Veterinary Research<br>42(2):183-188 |

Polychlorinated dibenzofurans (No postings in CHEMLINE).
Seal, grey
HALICHOERUS GRUPUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1229<br>Adipose | | GC/MS | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable | a) 1 pg/g<br>b) 15 pg/g<br>c) 8 pg/g<br>d) 10 pg/g<br>e) 3 pg/g<br>f) 40 pg/g | a) Tetra-CDFs<br>b) Penta-CDFs<br>c) Hexa-CDFs<br>d) Hepta-CDFs<br>e) Octa-CDFs<br>f) Total PCDFs<br>PCBs assumed to be major contamination source<br><br>Baltic Sea, Gulf of Bothnia<br><br>SEALS; TURTLES; NEW YORK; SWEDEN; ADIPOSE TISSUE; BIOACCUMULATION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS | Rappe, C.<br>Buser, H.R.<br>Stalling, D.L.<br>Smith, L.M.<br>Dougherty, R.C.<br>1981<br>Science<br>292(5823):524-526 |

Polychlorinated dibenzofurans (No postings in CHEMLINE).
Turtle, snapping
CHELYDA SERPENTINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1230<br>Adipose | | GC/MS | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable | a) 45 pg/g<br>b) 820 pg/g<br>c) 700 pg/g<br>d) 1,000 pg/g<br>e) 350 pg/g<br>f) 3,000 pg/g | a) Tetra-CDFs<br>b) Penta-CDFs<br>c) Hexa-CDFs<br>d) Hepta-CDFs<br>e) Octa-CDFs<br>f) Total PCDFs<br>PCBs assumed to be major contamination source<br><br>New York, Hudson River<br><br>SEALS; TURTLES; NEW YORK; SWEDEN; ADIPOSE TISSUE; BIOACCUMULATION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS | Rappe, C.<br>Buser, H.R.<br>Stalling, D.L.<br>Smith, L.M.<br>Dougherty, R.C.<br>1981<br>Science<br>292(5823):524-526 |

Polychlorinated naphthalenes (No postings in CHEMLINE).
Kestrel
FALCO TINUNCULUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1231<br>Kidney | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 340 +or- 15 ppb<br>b) 200 +or- 20 ppb<br>c) 170 +or- 10 ppb<br>d) 140 +or- 20 ppb<br>e) 120 +or- 10 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas, b), c) country districts<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

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Polychlorinated naphthalenes (No postings in CHEMLINE).
Kestrel
FALCO TINNUNCULUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1232<br>Liver | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 180 +or- 6 ppb<br>b) 89 +or- 4 ppb<br>c) 24 +or- 4 ppb<br>d) 49 +or- 4 ppb<br>e) 10 +or- 1 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas, b), c) country districts<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 1233<br>Muscle | | GC/MS | a) 1<br>b) 1<br>c) 1<br>d) 1<br>e) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable | a) 120 +or- 6 ppb<br>b) 30 +or- 2 ppb<br>c) 31 +or- 1 ppb<br>d) 19 +or- 1 ppb<br>e) 13 +or- 2 ppb<br>Wet wt | a) Central Bristol<br>b) Devizes, Wiltshire<br>c) Perranuthoe, Cornwall<br>d) North Cornwall<br>e) South Bristol<br>a), d), e) Urban/industrial areas, b), c) country districts<br>Pectoral muscle<br>Dry wt values also given<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Polychlorinated naphthalenes (No postings in CHEMLINE).
Owl, barn
TYTO ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1234<br>Kidney | | GC/MS | 1 | Not applicable | 150 +or- 10 ppb wet wt<br>(680 +or- 50 ppb dry wt) | Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

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Polychlorinated naphthalenes (No postings in CHEMLINE).
Owl, barn
TYTO ALBA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1235<br>Liver | | GC/MS | 1 | Not applicable | 45 +or- 1 ppb wet wt<br>(160 +or- 3 ppb dry wt) | Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 1236<br>Muscle | | GC/MS | 1 | Not applicable | 17 +or- 1 ppb wet wt<br>(70 +or- 4 ppb dry wt) | Pectoral muscle<br>Tisbury, Somerset (country district)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Polychlorinated naphthalenes (No postings in CHEMLINE).
Sparrowhawk
ACCIPITER NISUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1237<br>Kidney | | GC/MS | 1 | Not applicable | 200 +or- 20 ppb wet wt<br>(630 +or- 60 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |
| 1238<br>Liver | | GC/MS | 1 | Not applicable | 64 +or- 6 ppb wet wt<br>(180 +or- 16 ppb dry wt) | East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPHTHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

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Polychlorinated naphthalenes (No postings in CHEMLINE).
Sparrowhawk
ACCIPITER NISUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1239<br>Muscle | | GC/MS | 1 | Not applicable | 28 +or- 2 ppb wet wt (100 +or- 7 ppb dry wt) | Pectoral muscle<br>East Bristol (urban/industrial area)<br>Death not related to organochlorine levels<br><br>England (SW)<br><br>BIRDS; POLYCHLORINATED NAPETHALENES; UNITED KINGDOM; KIDNEYS; LIVER; MUSCLES; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION | Cooke, M.<br>Roberts, D.J.<br>Tillett, M.E.<br>1980<br>Science of the Total Environment 15:237-246 |

Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Blackbird, redwing
AGELAIUS PHOENICEUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1240<br>Muscle | Ingestion | | 1 | Not applicable | 7.6 mg/kg | Dead bird collected near feeding station in vicinity of food processing plant. Bait treated with 18 mg/kg 4-AP to frighten birds.<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |

Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Gull, herring
LARUS ARGENTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1241<br>Brain | Ingestion | | 5 | 1.7-4.1 mg/kg | 2.8 +or- 1.0 mg/kg | Dead or dying birds collected near feeding stations at food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1242<br>Heart | Ingestion | | 4 | 2.7-3.8 mg/kg | 3.0 +or- 0.4 mg/kg | Dead or dying birds collected near feeding stations at food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |

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Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Gull, herring
LARUS ARGENTATUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1243 Kidney | Ingestion | | 6 | 2.1-5.1 mg/kg | 3.8 +or- 1.7 mg/kg | Dead or dying birds collected near feeding stations at food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1244 Liver | Ingestion | | 10 | 2.7-5.2 mg/kg | 3.4 +or- 0.9 mg/kg | Dead or dying birds collected near feeding stations at food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>BIRDS; CANADA; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BRAIN | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1245 Lung | Ingestion | | 2 | 3.9-5.7 mg/kg | 4.8 +or- 1.3 mg/kg | Dead or dying birds collected near feeding stations at food processing plants, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1246 Muscle | Ingestion | | 5 | 2.2-5.9 mg/kg | 4.3 +or- 1.4 mg/kg | Dead or dying birds collected near feeding stations at food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.0 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |

Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Pigeon, domestic
COLUMBA LIVIA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1247 Brain | Ingestion | | 4 | 2.8-9.6 mg/kg | 4.8 +or- 4.1 mg/kg | Dead or dying birds collected at feeding stations near food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds<br>Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |

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Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Pigeon, domestic
COLUMBA LIVIA

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1248 Kidney | Ingestion | | 3 | 4.6-7.2 mg/kg | 5.9 +or- 1.8 mg/kg | Dead or dying birds collected at feeding stations near food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R. Sirons, G.J. Wilson, D. 1981 Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1249 Liver | Ingestion | | 4 | 1.4-10.8 mg/kg | 4.6 +or- 4.3 mg/kg | Dead or dying birds collected at feeding stations near food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP tc frighten birds Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R. Sirons, G.J. Wilson, D. 1981 Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1250 Muscle | Ingestion | | 3 | 0.3-6.3 mg/kg | 4.2 +or- 3.4 mg/kg | Dead or dying birds collected at feeding stations near food processing plants and hospitals, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R. Sirons, G.J. Wilson, D. 1981 Bulletin of Environmental Contamination and Toxicology 26:389-392 |

Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Sparrow, house
PASSER DOMESTICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1251 Brain | Ingestion | | 2 | 0.4-1.2 mg/kg | 0.8 +or- 0.6 mg/kg | Dead or dying birds collected at feeding stations near food processing plants, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R. Sirons, G.J. Wilson, D. 1981 Bulletin of Environmental Contamination and Toxicology 26:389-392 |
| 1252 Liver | Ingestion | | 2 | 0.9-2.9 mg/kg | 1.9 +or- 1.4 mg/kg | Dead or dying birds collected at feeding stations near food processing plants, 1976-78. Bait treated with 18 mg/kg 4-AP to frighten birds Lethal dose 4.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R. Sirons, G.J. Wilson, D. 1981 Bulletin of Environmental Contamination and Toxicology 26:389-392 |

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Pyridine, 4-amino- (8 CI)
4-Pyridinamine (9 CI)
504-24-5
C5-H6-N2
MW 94.12, MP 158-159 C, BP 180 C
Sparrow, house
PASSER DOMESTICUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1253<br>Muscle | Ingestion | | 2 | 0.5-2.1 mg/kg | 1.3 +or- 1.1 mg/kg | Dead or dying birds collected at feeding stations near food processing plants, 1976-78. Bait treated with 10 mg/kg 4-AP to frighten birds<br>Lethal dose 1.4 mg/kg<br><br>CANADA; BRAIN; HEART; KIDNEYS; LIVER; LUNGS; MUSCLES; BIOACCUMULATION; BIRDS | Frank, R.<br>Sirons, G.J.<br>Wilson, D.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 26:389-392 |

Quinidine (8 CI)
Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)
56-54-2
C20-H24-N2-O2
MW 324.41, MP 174-175 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1254<br>Blood, plasma | Injection<br>Ingestion | GC | a) 7<br>b) 7 | a) 4.26-53.8 ug/ml<br>b) Not given | a) 27.5 +or- 22.1 ug/ml<br>b) 0.26 ug/ml (peak) | a) 5 min after 5 mg quinidine gluconate/kg IV<br>b) 41 min after 15.84 mg quinidine SO4/kg orally<br>Healthy adult Holsteins and Guernseys, wt 518-750 kg<br><br>Ataxia, photophobia, blepharospasm after IV dose<br><br>CATTLE; OHIO; ADULTS; BLOOD PLASMA; ANTIARRHYTHMIC AGENTS; DRUGS; BIOACCUMULATION | McGuirk, S.M.<br>Muir, W.W.<br>Sams, R.A.<br>1981<br>American Journal of Veterinary Research 42(9):1482-1487 |

Selenium
7782-49-2
Se
ATW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1255<br>Kidney | | AAS | 4 | 2.20-0.05 ppm wet wt | 2.60 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DIE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VARIATION | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bass, largemouth
MICROPTERUS SALMOIDES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1256<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 298.8 ppb<br>b) 167.3 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bass, smallmouth
MICROPTERUS DOLOMIEUI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1257<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 123.9 ppb<br>b) 18.7 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1258<br>Liver | | ES | 1 | a) 0.64-0.7 ug/g<br>b) Not applicable<br>Wet wt | a) 0.66 +or- 0.03 ug/g<br>b) 0.36 +or- 0.10 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significantly higher levels in large lobe<br>Gravid fish, wt 25 lb, length 34 in<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

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Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 12*9 Muscle | | ES | 1 | 0.12-0.57 ug/g wet wt | 0.3 +or- 0.2 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-9 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bluefish
POMATOMUS SALTATRIX

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1260 Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 423.6 ppb<br>b) 82.1 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Bullhead
ICTALURUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1261 Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 204.3 ppb<br>b) 55.0 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTIC. METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1262<br>Blood, plasma | Ingestion | AAS | 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 0.132 ppm<br>b) 0.128 ppm<br>c) 0.141 ppm<br>d) 0.147 ppm | a) 0 ug/d<br>b) 6 ug/l<br>c) 48 ug/d<br>d) 100 ug/d<br>Na selenite for 3X8 d with 5 recovery days between treatments<br>Identical twins (2 Holstein pairs, 1 Holstein-Jersey pair), in mid-lactation and in 3rd and 6th mo of lactation<br><br>Lameness, stiffness of front legs, loss of hair at 170 ug and 260 ug doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montesurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |
| 1263<br>Blood, serum | Injection | Fluorometry | a) 12<br>b) 12 | a) Not given<br>b) Not given | a) 0.01 ppm<br>b) 0.08 ppm | a) Controls<br>b) Se-treated group (P<0.001)<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days.<br>Pooled samples at 21-day intervals<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, E.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1264<br>Epididymis | Injection | Fluorometry | 24 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.39 +or- 0.05 ppm<br>b) 0.44 +or- 0.05 ppm<br>c) 0.31 +or- 0.01 ppm<br>d) 0.34 +or- 0.03 ppm<br>e) 0.71 +or- 0.06 ppm<br>f) 0.78 +or- 0.1 ppm<br>Wet wt | a) Caput, controls<br>b) Caput, Se-treated group<br>c) Corpus, controls<br>d) Corpus, Se-treated group<br>e) Cauda, controls<br>f) Cauda, Se-treated group<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, E.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1265<br>Heart | Ingestion | Fluorometry | 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 1.490 ppm<br>b) 1.347 ppm<br>c) 1.148 ppm<br>d) 1.143 ppm<br>Dry wt | a) Maternal, cow 1<br>b) Fetal, cow 1<br>c) Maternal, cow 2<br>d) Fetal, cow 2<br>Identical Holstein twins fed 170 ug/d (cow 1) or 260 ug/d (cow 2) Na selenite for 2X10 d with 4 recovery days between treatments. Sacrificed 10 d after last dose, in 4th mo of gestation<br><br>Lameness, stiffness of front legs, loss of hair at 170 ug and 260 ug doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montesurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |

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Selenium
7782-49-2
Se
At# 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1266<br>Kidney | Injection | Fluorometry | a) 12<br>b) 12 | a) Not given<br>b) Not given | a) 0.84 +or- 0.06 ppm<br>b) 1.27 +or- 0.1 ppm<br>Wet wt | a) Controls<br>b) Se-treated group (P<0.005)<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, B.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1267<br>Kidney | Ingestion | Fluorometry | 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 7.60 ppm<br>b) 1.94 ppm<br>c) 6.60 ppm<br>d) 1.65 ppm<br>Dry wt | a) Maternal, cow 1<br>b) Fetal, cow 1<br>c) Maternal, cow 2<br>d) Fetal, cow 2<br>Identical Holstein twins fed 170 mg/d (cow 1) or 260 mg/d (cow 2) Na selenite for 2X10 d with 4 recovery days between treatments. Sacrificed 10 d after last dose, in 4th mo of gestation<br><br>Lameness, stiffness of front legs, loss of hair at 170 mg and 260 mg doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montesurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |
| 1268<br>Liver | Injection | Fluorometry | a) 12<br>b) 12 | a) Not given<br>b) Not given | a) 0.1 +or- 0.01 ppm<br>b) 0.37 +or- 0.04 ppm<br>Wet wt | a) Controls<br>b) Se-treated group (P<0.001)<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, B.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1269<br>Liver | Ingestion | Fluorometry | 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 8.80 ppm<br>b) 6.33 ppm<br>c) 7.27 ppm<br>d) 4.55 ppm<br>Dry wt | a) Maternal, cow 1<br>b) Fetal, cow 1<br>c) Maternal, cow 2<br>d) Fetal, cow 2<br>Identical Holstein twins fed 170 mg/d (cow 1) or 260 mg/d (cow 2) Na selenite for 2X10 d with 4 recovery days between treatments. Sacrificed 10 d after last dose, in 4th mo of gest ion<br><br>Lameness, stiffness of front legs, loss of hair at 170 mg and 260 mg doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montesurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |

(NEXT PAGE)

Selenium
7782-49-2
Se
Atw 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Cattle
FCS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1270<br>Milk | Ingestion | AAS | 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) .028 ppm<br>b) 0.028 ppm<br>c) 0.033 ppm<br>d) 0.034 ppm<br>e) 0.028 ppm<br>f) 0.033 ppm<br>g) 0.062 ppm<br>h) 0.060 ppm | a) 0 mg/d<br>b) 6 mg/d<br>c) 12 mg/d<br>d) 24 mg/d<br>e) 48 mg/d<br>f) 100 mg/d<br>g) 170 mg/d<br>h) 260 mg/d<br>a)-f) Na selenite for 3X8 d with 5 recovery days between treatments. Identical twins (2 Holstein pairs, 1 Holstein-Jersey pair), in mid-lactation and in 3rd and 6th mo of gestation<br>b), g) Na selenite for 2X10 d with 4 recovery days between treatments. Identical Holstein twins<br><br>Lameness, stiffness of front legs, loss of hair at 170 mg and 260 mg doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montesurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |
| 1271<br>Semen | Injection | Fluorometry | 24 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.07 +or- 0.01 ppm<br>b) 0.16 +or- 0.02 ppm<br>c) 0.08 +or- 0.002 ppm<br>d) 0.13 +or- 0.02 ppm<br>e) 0.03 +or- 0.01 ppm<br>f) 0.03 +or- 0.005 ppm | a) Extended whole semen, controls<br>b) Extended whole semen, Se-treated group (P<0.001)<br>c) Supernatant fraction, controls<br>d) Supernatant fraction, Se-treated group (P<0.001)<br>e) Sperm pellet fraction, controls<br>f) Sperm pellet fraction, Se-treated group<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>No effects on sperm viability or number<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, E.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1272<br>Seminal vesicle | Injection | Fluorometry | a) 12<br>b) 12 | a) Not given<br>b) Not given | a) 0.1 +or- 0.01 ppm<br>b) 0.21 +or- 0.2 ppm<br>Wet wt | a) Controls<br>b) Se-treated group (P<0.001)<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, E.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |

(NEXT PAGE)

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Cattle
BOS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1273<br>Testis | Injection | Fluorometry | a) 12<br>b) 12 | a) Not given<br>b) Not given | a) 0.35 +or- 0.02 ppm<br>b) 0.42 +or- 0.01 ppm<br>Wet wt | a) Controls<br>b) Se-treated group (P<0.005)<br>Initial dose 50 mg IM, then 30 mg at 21-day intervals for 150 days<br>Yearling Angus bulls, mean wt 231 +or- 3 kg, mean age 331 +or- 6 days<br><br>North Carolina<br><br>CATTLE; SEMINAL VESICLE; EPIDIDYMIS; NORTH CAROLINA; KIDNEYS; LIVER; SEMEN; BIOACCUMULATION; SELENIUM | Segerson, E.C.<br>Johnson, B.H.<br>1981<br>Journal of Animal Science 51(2):395-401 |
| 1274<br>Urine | Ingestion | | 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 0.025 ppm<br>b) 0.041 ppm<br>c) 0.081 ppm<br>d) 0.137 ppm<br>e) 0.694 ppm<br>f) 1.63 ppm | a) 0 mg/d<br>b) 6 mg/d<br>c) 12 mg/d<br>d) 24 mg/d<br>e) 48 mg/d<br>f) 100 mg/d<br>Na selenite for 318 d with 5 recovery days between treatments<br>Identical twins (2 Holstein pairs, 1 Holstein-Jersey pair), in mid-lactation and in 3rd and 6th mo of lactation<br><br>Lameness, stiffness of front legs, loss of hair at 170 mg and 260 mg doses<br><br>CATTLE; CANADA; ADULTS; FETUS; BLOOD PLASMA; HEART; KIDNEYS; LIVER; MILK; URINE; SELENIUM; BIOACCUMULATION | Fisher, L.J.<br>Hoogendoorn, C.<br>Montemurro, J.<br>1980<br>Canadian Journal of Animal Science 60:79-80 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Dolphin
CCPYPHAENA HIPPURUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1275<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 154.9 ppb<br>b) 57.8 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1276<br>Kidney | | AAS | 10 | 2.40-5.00 ppm wet wt | 3.55 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Flounder

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1277<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 142.0 ppb<br>b) 27.8 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Muskellunge
ESOX MASQUINONGY

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1278<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 262.1 ppb<br>b) 62.0 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
At# 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Perch

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1279<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 167.5 ppb<br>b) 48.3 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
At# 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Pike, northern
ESOX LUCIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1280<br>Muscle | | GC | | a) 350.4-438.0 ppb<br>b) 68.4-137.9 ppb<br>Wet wt | a) 399.2 ppb<br>b) 93.6 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 3 samples<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
At# 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Salmon

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1281<br>Body | | NA | | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 3.0 ug/g<br>b) 2.8 ug/g<br>c) 4.7 ug/g<br>d) 4.2 ug/g<br>Dry wt | a) Vesturdalsa River, heavily affected by volcanic activity<br>b) Laxa I Adaldal River, affected by volcanic and geothermal activity<br>c) Nordura River, outside volcanic area<br>d) Selfljot River, far outside volcanic area<br>Fries, age 2-4 yr, electrofished 1975-78<br><br>Iceland<br><br>ICTY; CADMIUM; MERCURY; SELENIUM; ZINC; BIOACCUMULATION; ICELAND; JUVENILES; VOLCANOES; FISHES | Johannesson, T.<br>Lunde, G.<br>Steinnes, E.<br>1981<br>Acta Pharmacologica et Toxicologica 48:185-189 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1282<br>Kidney | | AAS | 15 | 2.10-6.40 ppm wet wt | 3.96 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Sandpiper, least
CALIDRIS POSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1283<br>Kidney | | AAS | 16 | 1.60-6.90 ppm wet wt | 4.23 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1284<br>Kidney | | AAS | 15 | 2.80-10.2 ppm wet wt | 5.62 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Shark, mako
ISURUS OXYRINCHUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1285<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 238.1 ppb<br>b) 118.7 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Snapper, red
LUTJANUS CAMPECHANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1286<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 315.9 ppb<br>b) 66.6 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Swordfish
XIPHIAS GLADIUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1287<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 416.0 ppb<br>b) 68.0 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tern, sooty
STERNA FUSCATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1288<br>Brain | | NA | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 4.73 +or- 0.27 ppm<br>b) 6.94 +or- 1.78 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1289<br>Eggs | | NA | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 3.78 +or- 0.23 ppm<br>b) 65.60 +or- 5.38 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS. Significantly higher levels (P < 0.01)<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1290<br>Feathers | | NA | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 18.67 +or- 0.89 ppm<br>b) 0.77 +or- 0.07 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1291<br>Kidney | | NA | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 41.23 +or- 3.51 ppm<br>b) 10.96 +or- 0.86 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA. Significantly higher levels (P < 0.01)<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |
| 1292<br>Liver | | NA | a) 4<br>b) 10 | a) Not given<br>b) Not given | a) 22.70 +or- 1.24 ppm<br>b) 18.08 +or- 1.58 ppm<br>Wet wt | a) Dry Tortugas, S. FUSCATA FUSCATA<br>b) Lisianski Island, S. FUSCATA CANUENSIS<br><br>Florida, Dry Tortugas<br>Hawaii, Lisianski Island<br><br>BIRDS; EGGS; FEATHERS; FLORIDA; HAWAII; ADULTS; BRAIN; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; BIOACCUMULATION; CADMIUM; LEAD; MERCURY; SELENIUM | Stoneburner, D.L.<br>Harrison, C.S.<br>1981<br>Science of the Total Environment 17:51-58 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tuna, albacore
THUNNUS ALALUNGA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1293<br>Muscle | | GC | | a) 427.6-647.8 ppb<br>b) 122.3-177.6 ppb<br>c) Not applicable<br>d) Not applicable<br>Wet wt | a) 542.2 ppb<br>b) 148.1 ppb<br>c) 203.0 ppb<br>d) 51.4 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Canned, packed in vegetable oil, 3 samples<br>c) Se II, IV<br>d) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tuna, bluefin
THUNNUS THYNNUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1298<br>Muscle | | GC | | a) 493.7-631.1 ppb<br>b) 128.2-205.0 ppb<br>Wet wt | a) 562.4 ppb<br>b) 166.6 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Canned, packed in vegetable oil, 2 samples<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tuna, skipjack
KATSUWONUS PELAMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1295<br>Muscle | | GC | | a) 474.4-557.5 ppb<br>b) 105.1-127.4 ppb<br>Wet wt | a) 516 ppb<br>b) 116.3 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Canned, packed in vegetable oil, 2 samples<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tuna, wahoo
ACANTHOCYBIUM SOLANDERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1296<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 326.6 ppb<br>b) 101.2 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Tuna, yellowfin
THUNNUS ALBACARES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1297<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 368.2 ppb<br>b) 124.7 ppb<br>c) 525.4 ppb<br>d) 98.3 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Canned, packed in vegetable oil, 1 sample<br>c) Se II, IV<br>d) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Walleye
STIZOSTEDION VITREUM VITREUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1298<br>Muscle | | GC | | a) Not applicable<br>b) Not applicable | a) 291.2 ppb<br>b) 163.1 ppb<br>Wet wt | a) Se II, IV<br>b) Se VI<br>Fresh, non-retail, 1 sample<br><br>NEW YORK; MUSCLES; MERCURY; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION; FISHES; MAMMALS | Cappon, C.J.<br>Smith, J.C.<br>1981<br>Archives of Environmental Contamination and Toxicology 10:305-319 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1299<br>Kidney | | AAS | 2 | 1.30-2.40 ppm wet wt | 1.77 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.M.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1300<br>Kidney | | AAS | 13 | 1.50-4.20 ppm wet wt | 2.43 ppm wet wt<br>Geometric mean | Levels within range known to inhibit reproduction<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.M.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Silicon
7440-21-3
Si
AtW 28.086, MP 1410 C, BP 2600 C, VP 1 mm Hg at 1724 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1301<br>Blood, plasma | | | a) 68<br>b) 26<br>c) 22<br>d) 19<br>e) 64<br>f) 38<br>g) 57<br>h) 16<br>i) 16 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 0.50 +or- 0.015 ug/ml<br>b) 0.91 +or- 0.049 ug/ml<br>c) 0.89 +or- 0.054 ug/ml<br>d) 1.03 +or- 0.052 ug/ml<br>e) 0.50 +or- 0.015 ug/ml<br>f) 0.65 +or- 0.077 ug/ml<br>g) 0.94 +or- 0.071 ug/ml<br>h) 0.55 +or- 0.109 ug/ml<br>i) 0.40 + or - 0.086 ug/ml | a) Lambs, age 49 d, confinement reared, milk replacer diet<br>b) Lambs, age 49 d, suckled and reared conventionally<br>c) Ewes, age 2 yr, confinement reared<br>d) Ewes, age 2 yr, conventionally reared<br>e) Lambs, age 49 d, confinement reared<br>f) Lambs, age 70 d, confinement reared<br>g) Lambs, age 100 d, confinement reared<br>h) Lambs, age 49 d, confinement reared<br>i) Lambs, age 49 d, confinement reared, 250,000 IU Vitamin D3 (IM) on day 27<br>Significantly lower values (P < 0.01) in confinement reared lambs, no significant difference in ewes<br>Significant increase (P < 0.01) with age<br><br>SHEEP; JUVENILES; SILICON; VITAMIN D; BIOACCUMULATION; DIETS; CANADA; ADULTS; BLOOD PLASMA | Hidiroglou, M.<br>Ivan, M.<br>Ihnat, M.<br>1981<br>American Journal of Veterinary Research 42(1):138-139 |

Silver
7440-22-4
Ag
AtW 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1302<br>Liver | | AAS | 1 | a) 0.016-0.11 ug/g<br>b) Not applicable<br>Wet wt | a) 0.08 +or- 0.05 ug/g<br>b) 0.11 +or- 0.02 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Signifcant differences among large lobe samples<br>Gravid fish, wt 25 lb, length 36 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |
| 1303<br>Muscle | | AAS | 1 | 0.001-0.008 ug/g wet wt | 0.003 +or- 0.003 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 36 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
Sus sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1304<br>Adipose | Ingestion | TLC | a) 8<br>b) 8<br>c) 7<br>d) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 0.019 +or- 0.003 mg/kg<br>b) 0.046 +or- 0.014 mg/kg<br>c) 0.087 +or- 0.078 mg/kg<br>d) 0.748 +or- 0.348 mg/kg | a) 0 mg/kg feed<br>b) 1.1 mg/kg feed<br>c) 11.0 mg/kg feed<br>d) 110.0 mg/kg feed<br>Withdrawal rations for 10 d before slaughter, preceded by 110 mg/kg feed for 10 d<br>Background value 0.019 +or- 0.003 mg/kg<br>Mixed-breed weaned pigs, age 8 wk, mean wt 17.3 kg<br><br>SWINE; SULFONAMIDES; IOWA; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; COMPARATIVE EVALUATIONS; BIOACCUMULATION | Lloyd, W.E.<br>Jenny, A.L.<br>Cox, D.F.<br>Rottinghaus, G.E.<br>1981<br>American Journal of Veterinary Research<br>42(2):339-343 |
| 1305<br>Blood | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 80.5 +or- 1.2 ppm<br>b) 56.8 +or- 4.9 ppm<br>c) 14.8 +or- 2.3 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g C14-sulfamethazine dose<br>Pigs, trained to consume medicated meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA; BLOOD; BRAIN; FECES; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; DRUGS; BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hannagar, E.B.<br>Struble, C.B.<br>1981<br>Drug Metabolism and Disposition<br>9(2):142-146 |
| 1306<br>Blood, plasma | Ingestion | TLC | a) 8<br>b) 8<br>c) 7<br>d) 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) Not detected<br>b) 0.150 +or- 0.139 mg/kg<br>c) 1.039 +or- 0.269 mg/kg<br>d) 10.363 +or- 2.824 mg/kg | a) 0 mg/kg feed<br>b) 1.1 mg/kg feed<br>c) 11.0 mg/kg feed<br>d) 110.0 mg/kg feed<br>Withdrawal rations for 10 d before slaughter, preceded by 110 mg/kg feed for 10 d<br>Mixed-breed weaned pigs, age 3 wk, mean wt 17.3 kg<br><br>SWINE; SULFONAMIDES; IOWA; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; COMPARATIVE EVALUATIONS; BIOACCUMULATION | Lloyd, W.E.<br>Jenny, A.L.<br>Cox, D.F.<br>Rottinghaus, G.E.<br>1981<br>American Journal of Veterinary Research<br>42(2):339-343 |
| 1307<br>Body | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 46.8 +or- 1.6 ppm<br>b) 32.0 +or- 2.3 ppm<br>c) 7.4 +or- 1.4 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g C14-sulfamethazine dose<br>Muscle, heart, liver, lungs, kidney, brain, spleen, GI tract removed<br>Pigs, trained to consume medicated meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA; BLOOD; BRAIN; FECES; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; DRUGS; BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hannagar, E.B.<br>Struble, C.B.<br>1981<br>Drug Metabolism and Disposition<br>9(2):142-146 |

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Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1308<br>Brain | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 38.9 +or- 0.7 ppm<br>b) 24.4 +or- 0.1 ppm<br>c) 5.0 +or- 1.0 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hanaager, E.R.<br>Struble, C.R.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |
| 1309<br>Heart | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 62.3 +or- 4.2 ppm<br>b) 39.8 +or- 3.5 ppm<br>c) 9.0 +or- 2.1 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hanaager, E.R.<br>Struble, C.R.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |
| 1310<br>Intestine | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 205.8 +or- 3.1 ppm<br>b) 125.2 +or- 2.5 ppm<br>c) 35.3 +or- 14.0 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Gastrointestinal tract and contents<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hanaager, E.R.<br>Struble, C.R.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |
| 1311<br>Kidney | Ingestion | TLC<br>GC | 31 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 0.048 +or- 0.012 mg/kg<br>b) Not detected<br>c) 0.088 +or- 0.041 mg/kg<br>d) 0.030 +or- 0.000 mg/kg<br>e) 0.334 +or- 0.098 mg/kg<br>f) 0.163 +or- 0.027 mg/kg<br>g) 4.446 +or- 0.763 mg/kg<br>h) 2.798 +or- 0.874 mg/kg | a) 0 mg/kg feed, TLC<br>b) 0 mg/kg feed, GC<br>c) 1.1 mg/kg feed, TLC<br>d) 1.1 mg/kg feed, GC<br>e) 11.0 mg/kg feed, TLC<br>f) 11.0 mg/kg feed, GC<br>g) 110.0 mg/kg feed, TLC<br>h) 110.0 mg/kg feed, GC<br>Withdrawal rations for 10 d before<br>slaughter, preceded by 110 mg/kg feed<br>for 10 d<br>TLC background value 0.048 +or- 0.012<br>mg/kg<br>Mixed-breed weaned pigs, age 8 wk,<br>mean wt 17.3 kg<br><br>SWINE; SULFONAMIDES; IOWA; ADIPOSE<br>TISSUE; BLOOD PLASMA; KIDNEYS; LIVER;<br>MUSCLES; DRUGS; COMPARATIVE<br>EVALUATIONS; BIOACCUMULATION | Lloyd, W.E.<br>Jenny, A.L.<br>Cox, D.F.<br>Bottinghaus, G.E.<br>1981<br>American Journal of<br>Veterinary Research<br>42(2):339-343 |

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Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-02-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1312<br>Kidney | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 97.0 +or- 2.3 ppm<br>b) 72.6 +or- 0.7 ppm<br>c) 15.2 +or- 0.1 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Major metabolites<br>N4-acetylsulfamethazine and a<br>N4-glucose conjugate<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hansager, E.R.<br>Struble, C.B.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |
| 1313<br>Liver | Ingestion | TLC<br>GC | 31 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 0.053 +or- 0.024<br>mg/kg<br>b) 0.002 +or- 0.005<br>mg/kg<br>c) 0.099 +or- 0.044<br>mg/kg<br>d) 0.049 +or- 0.054<br>mg/kg<br>e) 0.469 +or- 0.146<br>f) 0.309 +or- 0.132<br>mg/kg<br>g) 4.867 +or- 0.836<br>mg/kg<br>h) 4.242 +or- 1.342<br>mg/kg | a) 0 mg/kg feed, TLC<br>b) 0 mg/kg feed, GC<br>c) 1.1 mg/kg feed, TLC<br>d) 1.1 mg/kg feed, GC<br>e) 11.0 mg/kg feed, TLC<br>f) 11.0 mg/kg feed, GC<br>g) 110.0 mg/kg feed, TLC<br>h) 110.0 mg/kg feed, GC<br>Withdrawal rations for 10 d before<br>slaughter, preceded by 110 mg/kg feed<br>for 10 d<br>TLC background value 0.053 +or- 0.024<br>mg/kg<br>Mixed-breed weaned pigs, age 8 wk,<br>mean wt 17.3 kg<br><br>SWINE; SULFONAMIDES; IOWA; ADIPOSE<br>TISSUE; BLOOD PLASMA; KIDNEYS; LIVER;<br>MUSCLES; DRUGS; COMPARATIVE<br>EVALUATIONS; BIOACCUMULATION | Lloyd, W.E.<br>Jenny, A.L.<br>Cox, D.F.<br>Rottinghaus, G.E.<br>1981<br>American Journal of<br>Veterinary Research<br>42(2):339-343 |
| 1314<br>Liver | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 68.8 +or- 2.5 ppm<br>b) 44.7 +or- 1.3 ppm<br>c) 11.6 +or- 1.6 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g C<br>14-sulfamethazine dose<br>Major metabolites<br>N4-acetylsulfamethazine and a<br>N4-glucose conjugate<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hansager, E.R.<br>Struble, C.B.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |
| 1315<br>Lung | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 65.0 +or- 0.1 ppm<br>b) 42.5 +or- 0.4 ppm<br>c) 8.9 +or- 1.6 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Pigs, trained to consume medicated<br>meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA;<br>BLOOD; BRAIN; FECES; HEART;<br>INTESTINES; KIDNEYS; LIVER; LUNGS;<br>MUSCLES; SPLEEN; URINE; DRUGS;<br>BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Hansager, E.R.<br>Struble, C.B.<br>1981<br>Drug Metabolism and<br>Disposition<br>9(2):142-146 |

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Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1316<br>Muscle | Ingestion | TLC<br>GC | 31 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 0.018 +or- 0.017 mg/kg<br>b) 0.001 +or- 0.002 mg/kg<br>c) 0.041 +or- 0.027 mg/kg<br>d) 0.026 +or- 0.030 mg/kg<br>e) 0.164 +or- 0.081 mg/kg<br>f) 0.168 +or- 0.067 mg/kg<br>g) 2.155 +or- 0.530 mg/kg<br>h) 2.502 +or- 1.152 mg/kg | a) 0 mg/kg feed, TLC<br>b) 0 mg/kg feed, GC<br>c) 1.1 mg/kg feed, TLC<br>d) 1.1 mg/kg feed, GC<br>e) 11.0 mg/kg feed, TLC<br>f) 11.0 mg/kg feed, GC<br>g) 110.0 mg/kg feed, TLC<br>h) 110.0 mg/kg feed, GC<br>Withdrawal rations for 10 d before slaughter, preceded by 110 mg/kg feed for 10 d<br>TLC background-value 0.018 +or- 0.017 mg/kg<br>Mixed-breed weaned pigs, age 8 wk, mean wt 17.3 kg<br><br>SWINE; SULFONAMIDES; IOWA; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; COMPARATIVE EVALUATIONS; BIOACCUMULATION | Lloyd, W.E.<br>Jenny, A.L.<br>Cox, D.F.<br>Rottinghaus, G.E.<br>1981<br>American Journal of Veterinary Research<br>42(2):339-343 |
| 1317<br>Muscle | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 41.9 +or- 0.8 ppm<br>b) 27.9 +or- 0.8 ppm<br>c) 5.6 +or- 0.1 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g C14-sulfamethazine dose<br>Skeletal muscle<br>Major metabolites<br>N4-acetylsulfamethazine and a N4-glucose conjugate<br>Pigs, trained to consume medicated meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA; BLOOD; BRAIN; FECES; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; DRUGS; BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Manmager, E.R.<br>Struble, C.R.<br>1981<br>Drug Metabolism and Disposition<br>9(2):142-146 |
| 1318<br>Spleen | Ingestion | HPLC<br>Radiometry | a) 2<br>b) 2<br>c) 2<br>d) 2 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given | a) 56.1 +or- 0.4 ppm<br>b) 35.2 +or- 0.1 ppm<br>c) 5.6 +or- 0.1 ppm<br>d) <1.0 ppm | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 192 hr<br>Times after single 2 g C14-sulfamethazine dose<br>Pigs, trained to consume medicated meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA; BLOOD; BRAIN; FECES; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; DRUGS; BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Manmager, E.R.<br>Struble, C.R.<br>1981<br>Drug Metabolism and Disposition<br>9(2):142-146 |

(NEXT PAGE)

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
SUS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1319<br>Urine | Ingestion | HPLC<br>Radiometry | 8 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given | a) 5.8 +or- 3.1%<br>b) 39.6 +or- 11.2%<br>c) 61.6 +or- 13.1%<br>d) 71.3 +or- 17.7%<br>e) 74.1 +or- 17.0%<br>f) 77.8 +or- 10.0%<br>g) 79.9 +or- 11.3%<br>h) 81.3 +or- 10.6%<br>i) 81.5 +or- 10.6%<br>% of dose | a) 6 hr<br>b) 24 hr<br>c) 48 hr<br>d) 72 hr<br>e) 96 hr<br>f) 120 hr<br>g) 144 hr<br>h) 168 hr<br>i) 192 hr<br>Times after single 2 g<br>C14-sulfamethazine dose<br>Major metabolite<br>N4-acetylsulfamethazine<br>Pigs, trained to consume medicated meal within 10 min, wt 20-22 kg<br><br>SWINE; SULFONAMIDES; NORTH DAKOTA; BLOOD; BRAIN; FECES; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; URINE; DRUGS; BIOACCUMULATION; METABOLITES | Paulson, G.D.<br>Giddings, J.M.<br>Lamoureux, C.H.<br>Manseger, E.E.<br>Struble, C.B.<br>1981<br>Drug Metabolism and Disposition<br>9(2):142-146 |

Tellurium
13494-80-9
Te
MW 127.6, MP 449.5 C, BP 989.8 C, VP 1 mm Hg at 520 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1320<br>Liver | | AAS | 1 | a) 0.12-0.15 ug/g<br>b) Not applicable<br>Wet wt | a) 0.14 +or- 0.02 ug/g<br>b) 0.16 +or- 0.01 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |
| 1321<br>Muscle | | AAS | 1 | 0.076-0.130 ug/g wet wt | 0.10 +or- 0.03 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Thallium
7440-28-0
Tl
AtW 204.37, MP 303.5 C, BP 1457 C, VP 1 mm Hg at 825 C, 10 mm Hg at 1000 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1322<br>Liver | | AAS | 1 | a) <0.005-0.005 ug/g<br>b) <0.005-0.005 ug/g<br>Wet wt | a) <or=0.005 ug/g<br>b) <or=0.005 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 1323<br>Muscle | | AAS | 1 | <0.005-0.006 ug/g wet wt | 0.006 +or- 0.001 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Thiocyanic acid, ion(1-) (8 CI)
Thiocyanate (9 CI)
302-04-5
C-N-S
MW 58.08
Chicken
GALLUS DOMESTICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1324<br>Eggs | Ingestion | GC | a) 6<br>b) 6 | a) Not given<br>b) Not given | a) 1.6 mg/kg<br>b) 0.5 mg/kg | a) 10% Rapeseed meal (RSM) diet<br>b) Basal diet<br>Laying hens fed RSM for 15 wk to promote bactericidal activity in eggs. Level reached and maintained after 4 wk. Egg production 15% higher with RSM fed hens<br><br>England, Liverpool<br><br>CHICKENS; EGGS; BIOACCUMULATION; DIETS; THIOCYANATES; UNITED KINGDOM | Shuaib, A.A.C.<br>Beswick, G.<br>Tomlins, R.I.<br>1981<br>Journal of the Science of Food and Agriculture 32:347-352 |

Tin
7440-31-5
Sn
AtW 118.69, MP 231.9 C, BP 2507 C, VP 1 mm Hg at 1610 C, 10 mm Hg at 1890 C
Perm, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1325<br>Liver | | AAS | 1 | a) 0.31-0.35 ug/g<br>b) Not applicable<br>Wet wt | a) 0.33 +or- 0.02 ug/g<br>b) 0.34 +or- 0.02 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |
| 1326<br>Muscle | | AAS | 1 | 0.13-0.38 ug/g wet wt | 0.3 +or- 0.1 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23: 1-5 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, black
ANAS RUBRIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1327<br>Body | Ingestion | GC | a) 5<br>b) 5<br>c) 2<br>d) 5<br>e) 5<br>f) 4 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 7.5 ug/g<br>b) 33 ug/g<br>c) 8.6 ug/g<br>d) 43 ug/g<br>e) 8.8 ug/g<br>f) 41 ug/g | a) 10 ug/g<br>b) 50 ug/g<br>c) 10 ug/g, females<br>d) 50 ug/g, males<br>e) 10 ug/g, females<br>f) 50 ug/g, males<br>a), b) Dietary levels for 14 days after hatching, c)-f) for 84 days after hatching<br>Carcass<br><br>Collagen decrease (50 ug/g) and Ca increase (10 and 50 ug/g) in cervical vertebrae<br><br>DUCKS; JUVENILES; MISSOURI; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS | Mehrle, P.M.<br>Finley, E.T.<br>Ludke, J.L.<br>Sayer, F.L.<br>Kaiser, T.E.<br>1979<br>Pesticide Biochemistry and Physiology 10(2):160-173 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1328 Body | | GC-EC | 13 | 0.1-0.4 ppm wet wt | 0.21 ppm wet wt Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1329 Body | | GC | 6 | Not given | 15 ppm lipid wt Geometric mean | 2.4% lipid. Skin, beak, feet, gastrointestinal tract, liver removed Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R. Reichel, W.L. 1981 Journal of Toxicology and Environmental Health 8:325-330 |
| 1330 Brain | | GC | 6 | Not given | 0.15 ppm wet wt Geometric mean | 8.0% lipid Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R. Reichel, W.L. 1981 Journal of Toxicology and Environmental Health 8:325-330 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1331<br>Body | | GC-EC | 15 | Not applicable | 0.14 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1332<br>Body | | GC-EC | 30 | 0.1-0.5 ppm wet wt | 0.19 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1333<br>Body | | | 22 | 0.1-1.9 ppm wet wt | 0.24 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1334<br>Body | | GC-EC | 17 | 0.2-0.7 ppm wet wt | 0.29 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Avocet
RECURVIROSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1335<br>Liver | | AAS | 6 | 0.02-0.05 ppm wet wt | 0.02 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1336<br>Liver | | AAS | 1 | a) 0.040-0.045 ug/g<br>b) Not applicable<br>Wet wt | a) 0.04 +or- 0.01 ug/g<br>b) 0.033 +or- 0.007 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

(NEXT PAGE)

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Bass, striped
MORONE SAXATILIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1337<br>Muscle | | AAS | 1 | <0.01-0.063 ug/g wet wt | 0.03 +or- 0.03 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |
| 1338<br>Muscle | | AAS | 1 | 3.2-4.6 ug/g wet wt | 3.8 +or- 0.6 ug/g wet wt | Dorsal white muscle, 5 samples<br>Significant differences among samples<br>Gravid fish, wt 25 lb, length 34 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Heit, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1339<br>Liver | | AAS | 10 | 0.03-0.16 ppm wet wt | 0.06 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
Atw 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Eel, common
ANGUILLA ANGUILLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1380<br>Blood | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 2.01X10(E-5) g atom/kg<br>b) 1.32X10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 5 wk in water<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |
| 1381<br>Body | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 1.01X10(E-5) g atom/kg<br>b) 0.88X10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 5 wk in water<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |
| 1382<br>Bone | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 5.09X10(E-5) g atom/kg<br>b) 4.27X10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 5 wk in water<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |
| 1383<br>Kidney | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 7.08X10(E-5) g atom/kg<br>b) 5.89X10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 5 wk in water<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |
| 1384<br>Liver | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 10.60x10(E-5) g atom/kg<br>b) 11.17x10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 5 wk in water<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |
| 1385<br>Muscle | | Radiometry | a) 5<br>b) 5 | a) Not given<br>b) Not given | a) 0.72X10(E-5) g atom/kg<br>b) 0.57X10(E-5) g atom/kg<br>Wet wt | a) 8 wk in 10(E-5)M V48-orthovanadate<br>b) Further 3 wk in water<br>Mainly muscle, some skin, bone, gills and brain<br>Freshwater elvers, mean wt 1.55 g<br><br>EELS; UNITED KINGDOM; BLOOD; BODY; BONES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; VANADIUM | Bell, M.V.<br>Kelly, K.F.<br>Sargent, J.R.<br>1981<br>Science of the Total Environment 19:214-222 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1346<br>Body | | AAS | | Not given | 0.7 +or- 0.1 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1347<br>Gills | | AAS | | Not given | 0.5 +or- 0.2 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1348<br>Gonads | | AAS | | a) Not given<br>b) Not given | a) 0.3 +or- 0.1 ug/g<br>b) 0.2 +or- 0.2 ug/g<br>Dry wt | a) Male<br>b) Female<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1349<br>Heart | | AAS | | Not given | 25 +or- 2 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1350<br>Hepatopancreas | | AAS | | Not given | 4.5 +or- 1 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

(NEXT PAGE)

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1351 Intestine | | AAS | | Not given | 0.4 +or- 0.1 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P. Guary, J.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1352 Kidney | | AAS | | Not given | 140 +or- 30 ug/g dry wt | Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P. Guary, J.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1353 Muscle | | AAS | | Not given | 0.3 +or- 0.2 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P. Guary, J.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1354 Skin | | AAS | | Not given | 0.3 +or- 0.1 ug/g dry wt | Mantle<br>Pooled tissues of 50 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P. Guary, J.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1355 Liver | | AAS | 15 | 0.02-1.20 ppm wet wt | 0.07 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1356 Liver | | AAS | 16 | 0.03-0.23 ppm wet wt | 0.07 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1357 Liver | | AAS | 15 | 0.03-0.58 ppm wet wt | 0.10 ppm wet wt Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Yellowlegs, greater
TRINGA MELANOLEUCUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1358<br>Liver | | AAS | 2 | 0.02-0.04 ppm wet wt | 0.03 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Vanadium
7440-62-2
V
AtW 50.9414, MP 1917 C, BP 3000 C, VP 1 mm Hg at 2290 C, 10 mm Hg at 2570 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1359<br>Liver | | AAS | 13 | 0.02-0.16 ppm wet wt | 0.04 ppm wet wt<br>Geometric mean | Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Bass, striped
MORONE SAXATILIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1360<br>Liver | | AAS | 1 | a) 36-39 ug/g<br>b) Not applicable<br>Wet wt | a) 36 +or- 3 ug/g<br>b) 32 +or- 2 ug/g<br>Wet wt | a) Large lobe, 3 samples<br>b) Small lobe, 1 sample<br>Significant differences among large lobe samples<br>Gravid fishes, wt 25 lb, length 30 in.<br><br>Chesapeake Bay<br><br>MARYLAND; NEW YORK; VIRGINIA; ADULTS; LIVER; MUSCLES; ANTIMONY; ARSENIC; BERYLLIUM; CADMIUM; CHROMIUM; COPPER; GALLIUM; LEAD; MERCURY; NICKEL; SELENIUM; SILVER; THALLIUM; TIN; TRACE ELEMENTS; VANADIUM; ZINC; FISHES; WATER POLLUTION; TELLURIUM | Holt, M.<br>1979<br>Bulletin of Environmental Contamination and Toxicology 23:1-5 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Coyote
CANIS LATRANS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1361<br>Hair | | AAS | 10 | 150-170 ug/g wet wt | 160 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit<br>(Crandon)<br><br>Wisconsin<br><br>HARES; COYOTES; VOLES; DEER MICE;<br>SHREWS; OTTERS; JUVENILES; WISCONSIN;<br>ADULTS; BODY; HAIR; KIDNEYS; LIVER;<br>ARSENIC; CADMIUM; COPPER; LEAD;<br>MERCURY; METALS; NICKEL; ZINC;<br>BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 27:28-33 |
| 1362<br>Kidney | | AAS | 10 | 23-24 ug/g wet wt | 24 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit<br>(Crandon)<br><br>Wisconsin (W)<br><br>HARES; COYOTES; VOLES; DEER MICE;<br>SHREWS; OTTERS; JUVENILES; WISCONSIN;<br>ADULTS; BODY; HAIR; KIDNEYS; LIVER;<br>ARSENIC; CADMIUM; COPPER; LEAD;<br>MERCURY; METALS; NICKEL; ZINC;<br>BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 27:28-33 |
| 1363<br>Liver | | AAS | 10 | 43-43 ug/g wet wt | 43 ug/g wet wt | 2 composite samples<br>Trapped near unmined Cu-Zn deposit<br>(Crandon)<br><br>Wisconsin (W)<br><br>HARES; COYOTES; VOLES; DEER MICE;<br>SHREWS; OTTERS; JUVENILES; WISCONSIN;<br>ADULTS; BODY; HAIR; KIDNEYS; LIVER;<br>ARSENIC; CADMIUM; COPPER; LEAD;<br>MERCURY; METALS; NICKEL; ZINC;<br>BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Mongstad, O.J.<br>1981<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Dogfish
SCYLIORHINUS CANICULA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1364<br>Gills | | AAS | 78 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given | a) 83 +or- 21 ug/g<br>b) 2800 +or- 1700<br>ug/g<br>c) 520 +or- 330 ug/g<br>d) 660 +or- 240 ug/g<br>e) 65 +or- 21 ug/g<br>f) 170 +or- 61 ug/g<br>g) 140 +or- 23 ug/g<br>h) 110 +or- 21 ug/g<br>Dry wt | a) Controls<br>b) 14 hr, 175 ppm<br>c) 14 hr, 80 ppm<br>d) 24 hr, 80 ppm<br>e) Controls<br>f) 14 hr, 175 ppm<br>g) 14 hr, 80 ppm<br>h) 24 hr, 80 ppm<br>Exposure times to Zn SO4 in seawater<br>a) - d) Filaments, e) - h) arches<br><br>LC 50 24 hr = 180 ppm, LC50 48 hr =<br>80 ppm<br><br>GILLS; SPAIN; ZINC; BIOACCUMULATION;<br>FISHES | Crespo, S.<br>Balasch, J.<br>1980<br>Bulletin of<br>Environmental<br>Contamination and<br>Toxicology 24:940-944 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Hare, snowshoe
LEPUS AMERICANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1365<br>Body | | AAS | 2 | Not given | 29 ug/g wet wt | Trapped near unmined Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Mouse, deer
PEROMYSCUS MANICULATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1366<br>Body | | AAS | 30 | a) Not given<br>b) Not given | a) 33 ug/g<br>b) 31 +or- 3 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 5 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronsstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Mussel, common
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1367<br>Muscle | | AAS | a) 20<br>b) 20<br>c) 20<br>d) 20<br>e) 20<br>f) 20<br>g) 20<br>h) 20<br>i) 20<br>j) 20<br>k) 20<br>l) 20<br>m) 20<br>n) 20<br>o) 20<br>p) 20<br>q) 20<br>r) 20<br>s) 20 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given<br>l) Not given<br>m) Not given<br>n) Not given<br>o) Not given<br>p) Not given<br>q) Not given<br>r) Not given<br>s) Not given | a) 361 +or- 144 ug/g<br>b) 264 +or- 122 ug/g<br>c) 170 +or- 46 ug/g<br>d) 396 +or- 83 ug/g<br>e) 82 +or- 47 ug/g<br>f) 90 +or- 34 ug/g<br>g) 45 +or- 15 ug/g<br>h) 52 +or- 19 ug/g<br>i) 122 +or- 63 ug/g<br>j) 146 +or- 43 ug/g<br>k) 126 +or- 30 ug/g<br>l) 211 +or- 72 ug/g<br>m) 88 +or- 48 ug/g<br>n) 100 +or- 50 ug/g<br>o) 179 +or- 60 ug/g<br>p) 81 +or- 24 ug/g<br>q) 125 +or- 50 ug/g<br>r) 175 +or- 87 ug/g<br>s) 65 +or- 23 ug/g<br>Dry wt | a) Smygehuk<br>b) Falsterbo Kanal<br>b) Barseback<br>d) Saxtorp<br>e) Fortuna<br>f) Viken<br>g) Kullen<br>h) Bipagarden<br>i) Haverdalsstrand<br>j) Hoverup<br>k) Nomede<br>l) Dragor<br>m) Kobenhaven<br>n) Taarback<br>o) Niverod<br>p) Helsinger<br>q) Gilleleje<br>r) Salthola<br>s) Ven<br>Whole soft parts, composite samples<br>General decrease from south to north, some pronounced on Swedish than on Danish coast. Collected 6/1977<br>Values also for algae at some locations<br><br>Sweden/Denmark, Baltic Sea, Oresund<br><br>MOLLUSKS; BIOACCUMULATION; WATER POLLUTION; CADMIUM; IRON; LEAD; ZINC; ECOT; SWEDEN | Phillips, D.J.<br>1979<br>Environmental Pollution 18:31-43 |



Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Octopus, Mediterranean
OCTOPUS VULGARIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1368<br>Body | | AAS | | Not given | 150 +or- 50 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1369<br>Gills | | AAS | | Not given | 120 +or- 20 ug/g dry wt | Gills and branchial glands<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1370 Gonads | | AAS | | a) Not given<br>b) Not given | a) 360 +or- 200 ug/g<br>b) 100 +or- 60 ug/g<br>Dry wt | a) Male<br>b) Female<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1371 Heart | | AAS | | Not given | 65 +or- 15 ug/g dry wt | Branchial hearts and appendages<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1372 Hepatopancreas | | AAS | | Not given | 1650 +or- 400 ug/g dry wt | 57% of whole animal content<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1373 Intestine | | AAS | | Not given | 130 +or- 30 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1374 Kidney | | AAS | | Not given | 140 +or- 30 ug/g dry wt | Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Octopus, Mediterranean
OCTOPUS VULGARIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1375<br>Muscle | | AAS | | Not given | 70 +or- 30 ug/g dry wt | Mantle<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |
| 1376<br>Skin | | AAS | | Not given | 50 +or- 10 ug/g dry wt | Mantle<br>Pooled tissues of 54 cephalopods, mean wt 640 g<br><br>Mediterranean Sea, Monaco<br><br>OCTOPUS; MONACO; HEPATOPANCREAS; GILLS; GONADS; BODY; GASTROINTESTINAL SYSTEM; HEART; KIDNEYS; MUSCLES; SKIN; CADMIUM; COPPER; IRON; MANGANESE; METALS; VANADIUM; ZINC; BIOACCUMULATION; WATER POLLUTION | Miramand, P.<br>Guary, J.C.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:783-788 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Otter
LUTRA CANADENSIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1377<br>Body | | AAS | 5 | Not given | 14 ug/g wet wt | Composite sample<br>Trapped near unnamed Cu-Zn deposit (Crandon)<br><br>Wisconsin (N)<br><br>RABIES; COYOTES; FOXES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Rongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
ATM 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 598 C
Oyster, Pacific
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1378<br>Body | | AAS | 5 | a) Not given<br>b) Not given | a) 1046 +or- 174 ug/g<br>b) 780 +or- 256 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1379<br>Gills | | AAS | 20 | a) Not given<br>b) Not given | a) 1313 +or- 86 ug/g<br>b) 1360 +or- 296 ug/g | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1380<br>Intestine | | AAS | 20 | a) Not given<br>b) Not given | a) 1013 +or- 91 ug/g<br>b) 1066 +or- 395 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Viscera<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1381<br>Mantle | | AAS | 20 | a) Not given<br>b) Not given | a) 1183 +or- 420 ug/g<br>b) 1180 +or- 292 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |
| 1382<br>Muscle | | AAS | 20 | a) Not given<br>b) Not given | a) 733 +or- 92 ug/g<br>b) 740 +or- 17 ug/g<br>Dry wt | a) Tsim Bei Tsai<br>b) Mai Po<br>Adductor muscle<br>Collected summer 1977 from culture beds<br><br>Hong Kong, Deep Bay<br><br>OYSTERS; HONG KONG; GILLS; INTESTINES; MANTLE; BIOACCUMULATION; WATER POLLUTION; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; ZINC; BODY; MUSCLES | Wong, M.H.<br>Choy, C.K.<br>Lau, W.M.<br>Cheung, Y.H.<br>1981<br>Environmental Research 25:302-309 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Salmon

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1383<br>Body | | AAS | | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable | a) 190 ug/g<br>b) 160 ug/g<br>c) 140 ug/g<br>d) 200 ug/g<br>Dry wt | a) Vesturdalsa River, heavily affected by volcanic activity<br>b) Laxa i Adaldal River, affected by volcanic and geothermal activity<br>c) Nordura River, outside volcanic area<br>d) Selfljot River, far outside volcanic area<br>Fries, age 2-4 yr, electrofished 1975-78<br><br>Iceland<br><br>BODY; CADMIUM; MERCURY; SELENIUM; ZINC; BIOACCUMULATION; ICELAND; JUVENILES; VOICANOES; FISHES | Johannesson, T.<br>Lunde, G.<br>Steinnes, E.<br>1981<br>Acta Pharmacologica et Toxicologica 48:185-189 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1384<br>Adrenal gland | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 55-56 ppm<br>b) 52-54 ppm<br>Dry wt | a) 56 ppm<br>b) 53 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hanchek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 1385<br>Blood | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 8-13 ppm<br>b) 9-12 ppm<br>Dry wt | a) 11 ppm<br>b) 11 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Hanchek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1386<br>Bone | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | 70-90 ppm<br>b) 74-82 ppm<br>Dry wt | a) 80 ppm<br>b) 78 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Baschek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 1387<br>Brain | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 45-54 ppm<br>b) 51-59 ppm<br>Dry wt | a) 50 ppm<br>b) 55 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Baschek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 1388<br>Heart | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 31-63 ppm<br>b) 62-71 ppm<br>Dry wt | a) 47 ppm<br>b) 67 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Baschek, W.H.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

(NEXT PAGE)

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1389<br>Kidney | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 70-84 ppm<br>b) 75-75 ppm<br>Dry wt | a) 77 ppm<br>b) 75 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 1390<br>Liver | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 119-138 ppm<br>b) 104-104 ppm<br>Dry wt | a) 129 ppm<br>b) 104 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |
| 1391<br>Liver | Ingestion | AAS | a) 3<br>b) 4<br>c) 12<br>d) 3<br>e) 10<br>f) 9 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given | a) 251.9 +or- 20.9 ug/kg<br>b) 915.8 +or- 184.8 ug/kg<br>c) 2048 +or- 359.8 ug/kg<br>d) 262.2 +or- 151.7 ug/kg<br>e) 3265 +or- 587 ug/kg<br>f) 2456 +or- 381 ug/kg | a) 30 mg Zn/kg<br>b) 150 mg Zn/kg<br>c) 750 mg Zn/kg<br>d) 30 mg Zn/kg and 2.5 mg Cu/kg<br>e) 750 mg Zn/kg and 2.5 mg Cu/kg<br>f) 750 mg Zn/kg and 10.0 mg Cu/kg<br>levels in non-viable lambs born to ewes on 110 day diets containing 30-750 mg/kg Zn and 2.5-10.0 mg/kg Cu prior to parturition<br><br>Severe Cu deficiency, arrested growth of long bones. Kidney damage in one lamb<br><br>SHEEP; COPPER; ZINC; BIOACCUMULATION; UNITED KINGDOM; ADULTS; HEMOGRN; NUTRITIONAL DEFICIENCIES; BLOOD PLASMA; LIVER | Campbell, J.K.<br>Mills, C.F.<br>1979<br>Environmental Research 20:1-13 |

(NEXT PAGE)

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1392<br>Pancreas | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 58-68 ppm<br>b) 73-91 ppm<br>Dry wt | a) 83 ppm<br>b) 82 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 1393<br>Spleen | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 42-44 ppm<br>b) 65-88 ppm<br>Dry wt | a) 43 ppm<br>b) 77 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |
| 1394<br>Testis | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 70-74 ppm<br>b) 69-76 ppm<br>Dry wt | a) 72 ppm<br>b) 73 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Haschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Lisk, D.J.<br>1979<br>Cornell Veterinarian<br>69:302-314 |

(NEXT PAGE)

Zinc
7440-66-6
Zr
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1395<br>Thyroid gland | Ingestion | NAA<br>AAS | a) 2<br>b) 2 | a) 35-49 ppm<br>b) 31-42 ppm<br>Dry wt | a) 42 ppm<br>b) 37 ppm<br>Dry wt | a) Controls<br>b) Sludge-grown diet<br>Dorset lambs, age 3 mo, fed diet of 30% dry wt cabbage grown on municipal sewage sludge for 77 days<br><br>New York, Syracuse<br><br>Increased liver wt, proliferation of hepatic smooth endoplasmic reticulum, liver degenerative changes in sheep feed sludge-grown cabbage<br><br>SHEEP; SLUDGES; NEW YORK; LIVER DISEASES; ADRENAL GLANDS; BLOOD; BONES; BRAIN; HEART; KIDNEYS; LIVER; PANCREAS; SPLEEN; TESTES; THYROID GLANDS; CADMIUM; COPPER; LEAD; NICKEL; POLYCHLORINATED BIPHENYLS; ZINC; BIOACCUMULATION | Maschek, W.M.<br>Furr, A.K.<br>Parkinson, T.F.<br>Heffron, C.L.<br>Reid, J.T.<br>Bache, C.A.<br>Wszolek, P.C.<br>Gutenmann, W.H.<br>Link, D.J.<br>1979<br>Cornell Veterinarian 69:302-314 |

Zinc
7440-66-6
Zr
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Shrew
SOREX CINEREUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1396<br>Body | | AAS | 45 | a) Not given<br>b) Not given | a) 38 ug/g<br>b) 36 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (N)<br><br>BARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
Aew 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Shrew, short-tailed
BLARINA BREVICAUDA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1397<br>Body | | AAS | 15 | a) Not given<br>b) Not given | a) 40 ug/g<br>b) 31 ug/g<br>Wet wt | a) Ladysmith, 2 samples<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br><br>Wisconsin (W)<br><br>BARNS; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Bongstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
Aew 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Shrimp
PANDALUS MONTAGUI

| TISSUE | DISCHARGE BODIES | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1398<br>Body | | AAS | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 91.6 +or- 3.63 ug/g<br>b) 104.6 +or- 3.31 ug/g<br>c) 169.7 +or- 6.61 ug/g<br>Dry wt | a) 40 ug Cd/l and 70 ug Zn/l<br>b) 35 ug Cd/l and 105 ug Zn/l<br>c) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Carcass<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CARCASS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Pezzack, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 1399<br>Body | | AAS | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 78.8 +or- 2.61 ug/g<br>b) 89.0 +or- 1.62 ug/g<br>c) 130.5 +or- 4.55 ug/g<br>Dry wt | a) 40 ug Cd/l and 70 ug Zn/l<br>b) 35 ug Cd/l and 105 ug Zn/l<br>c) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>External eggs removed<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Pezzack, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 1400<br>Eggs | | AAS | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 79.0 +or- 3.45 ug/g<br>b) 102.6 +or- 1.83 ug/g<br>c) 102.6 +or- 7.50 ug/g<br>Dry wt | a) 40 ug Cd/l and 70 ug Zn/l<br>b) 35 ug Cd/l and 105 ug Zn/l<br>c) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Pezzack, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |
| 1401<br>Hepatopancreas | | AAS | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 115.7 +or- 11.10 ug/g<br>b) 139.9 +or- 7.27 ug/g<br>c) 119.5 +or- 12.44 ug/g<br>Dry wt | a) 40 ug Cd/l and 70 ug Zn/l<br>b) 35 ug Cd/l and 105 ug Zn/l<br>c) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Berried females, wt 2-4 g<br><br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Pezzack, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |

(NEXT Page)

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Shrimp
PANDALUS MONTAGUI

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1402<br>Muscle | | AAS | a) 6<br>b) 6<br>c) 6 | a) Not given<br>b) Not given<br>c) Not given | a) 53.8 +or- 0.99 ug/g<br>b) 56.9 +or- 2.02 ug/g<br>c) 64.8 +or- 1.61 ug/g<br>Dry wt | a) 40 ug Cd/l and 70 ug Zn/l<br>b) 35 ug Cd/l and 105 ug Zn/l<br>c) 36 ug Cd/l and 410 ug Zn/l<br>Exposures in spiked seawater for 14 d<br>Tail muscle<br>Berried females, wt 2-4 g<br>SHRIMP; EGGS; HEPATOPANCREAS; CRUSTACEANS; CANADA; BODY; CADMIUM; ZINC; BIOACCUMULATION | Ray, S.<br>McLeese, D.W.<br>Waiwood, B.A.<br>Perriak, D.<br>1980<br>Archives of Environmental Contamination and Toxicology 9:675-681 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Vole, meadow
MICROTUS PENNSYLVANICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1403<br>Body | | AAS | 40 | a) Not given<br>b) Not given | a) 32 ug/g<br>b) 32 +or- 2 ug/g<br>Wet wt | a) Ladysmith, 1 sample<br>b) Crandon, 7 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Vole, red-backed
CLETHRIONOMYS GAPPERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1404<br>Body | | AAS | 35 | a) Not given<br>b) Not given | a) 32.3 +or- 0.3 ug/g<br>b) 40 ug/g<br>Wet wt | a) Ladysmith, 5 samples<br>b) Crandon, 2 samples<br>5 animals/composite sample<br>Trapped on and near unmined Cu-Zn deposits<br>Wisconsin (N)<br>HARES; COYOTES; VOLES; DEER MICE; SHREWS; OTTERS; JUVENILES; WISCONSIN; ADULTS; BODY; HAIR; KIDNEYS; LIVER; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; METALS; NICKEL; ZINC; BIOACCUMULATION; MINERAL DEPOSITS | Smith, G.J.<br>Ronqstad, O.J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:28-33 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b-undecachlorooctahydro-
39801-14-4
C10-H-Cl11
MW 511.06
Quail, Japanese
COTURNIX COTURNIX JAPONICA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1405<br>Liver | Ingestion | | a) 2<br>b) 2<br>c) 2<br>d) 2<br>e) 5 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given | a) 0.59 ppm<br>b) 66 ppm<br>c) 492 ppm<br>d) 1056 ppm<br>e) 188 ppm<br>Wet wt | a) Controls<br>b) 100 mg/kg<br>c) 500 mg/kg<br>d) 1000 mg/kg<br>e) 100 mg/kg/day for 27 days<br>b)-d) Single dose, quail sacrificed after 37 days<br>Adults, wt 120 g<br><br>Increase in liver weight and hepatic cytochrome P-450, cytoplasmic enlargement of hepatocytes<br><br>BIRDS; CANADA; NETHERLANDS; ADULTS; LIVER DISEASES; LIVER; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS | Strik, J.J.T.W.A.<br>Canton, A.M.J.<br>Janssen, H.H.Th.<br>Baraman, E.G.M.<br>Villeneuve, D.C.<br>Chu, I.<br>Valli, V.E.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:350-355 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-Cl12
MW 548.6, MP 485 C, VP 6E1C(E-6) mm Hg at 50 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1406<br>Body | | GC | 16 | Not given | 24 ppm lipid wt<br>Geometric mean | 2.5% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 1407<br>Brain | | GC | 16 | Not given | 0.22 ppm wet wt<br>Geometric mean | 6.5% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Gull, herring
LARUS ARGENTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1408<br>Eggs | | GC/MS | | a) 0.008-0.021 ppm<br>b) 0.006-0.014 ppm<br>c) 0.81-1.15 ppm<br>d) 0.043-0.097 ppm<br>e) 0.08-0.15 ppm<br>f) 1.97-3.07 ppm<br>g) 0.023-0.058 ppm<br>Wet wt | a) 0.016 +or- 0.005 ppm<br>b) 0.011 +or- 0.003 ppm<br>c) 0.95 +or- 0.14 ppm<br>d) 0.077 +or- 0.019 ppm<br>e) 0.119 +or- 0.025 ppm<br>f) 2.58 +or- 0.40 ppm<br>g) 0.039 +or- 0.011 ppm<br>Wet wt | a) 2,8-dihydromirex<br>b) C10Cl10H2(II), possible identity 3,8-dihydromirex<br>c) 8-monohydro-mirex<br>d) C10Cl11H(III), possible identity 9-monohydromirex<br>e) 10-monohydro-mirex<br>f) Mirex<br>g) C10Cl12(II), probable mirex isomer<br>Fresh, unincubated eggs from 7 colonies (Galloo Island, Pigeon Island, Snake Island, Brothers Island, Scotch Bonnet Island, Gull Island, Nuggs Island)<br>Collected 4-5/77<br>Pooled sample, 10 eggs/colony<br><br>Lake Ontario<br><br>EGGS; BIRDS; CANADA; NEW YORK; MEASUREMENT METHODS; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS | Norstrom, R.J.<br>Hallett, D.J.<br>1980<br>Environmental Science and Technology<br>14(7):860-866 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Ibis, white
EUDOCIMUS ALBUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1409<br>Eggs | | GC-EC | a) 10<br>b) 10 | a) Not detected-0.39 ug/g<br>b) Not detected | a) Not given<br>b) Not applicable | a) 1972<br>b) 1974<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C12
MW 545.6, BP 485 C, VP 6X10(E-6) mm Hg at 50 C
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1810 | | GC-EC | 14 | Not given | 40 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.R.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C12
MW 545.6, BP 485 C, VP 6X10(E-6) mm Hg at 50 C
Trout, brook
SALVELINUS FONTINALIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1811<br>Body | Ingestion | GC-EC | a) 10<br>b) 10<br>c) 10<br>d) 10<br>e) 10<br>f) 10<br>g) 10<br>h) 10<br>i) 10<br>j) 10<br>k) 10 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given<br>k) Not given | a) 1.2 ug/g<br>b) 1.8 ug/g<br>c) 3.7 ug/g<br>d) 3.9 ug/g<br>e) 6.3 ug/g<br>f) 7.9 ug/g<br>g) 8.0 ug/g<br>h) 5.6 ug/g<br>i) 5.2 ug/g<br>j) 4.1 ug/g<br>k) 2.1 ug/g<br>Wet wt | a) 17 d<br>b) 32 d<br>c) 56 d<br>d) 86 d<br>e) 104 d<br>f) 16 d<br>g) 32 d<br>h) 56 d<br>i) 86 d<br>j) 150 d<br>k) 385 d<br>a)-e) Days from start of feeding 0.7 mg/kg body wt 3Xwk for 10 wk, f)-k) days after cessation of feeding contaminated diet<br>Mean length 21.7 cm, mean wt 114.5 g at day 17 of test, mean length 34.8 cm, mean wt 570.6 g at day 385 of test<br><br>No abnormalities or reduction in growth. Mortality <5%<br><br>BIOACCUMULATION; FISHES; CHLORINE ORGANIC COMPOUNDS; NEW YORK; BODY | Skea, J.C.<br>Simonin, H.J.<br>Jackling, S.<br>Symula, J.<br>1981<br>Bulletin of Environmental Contamination and Toxicology 27:79-83 |

1,3,8-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C12
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Trout, rainbow
SALMO GAIRDNERI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1812<br>Body | Ingestion | | a) 6<br>b) 6<br>c) 6<br>d) 6<br>e) 6<br>f) 6<br>g) 6 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given | a) <0.02 mg/kg<br>b) 4.73 +or- 0.02 mg/kg<br>c) 3.51 +or- 0.25 mg/kg<br>d) 0.77 +or- 0.06 mg/kg<br>e) 0.95 +or- 0.09 mg/kg<br>f) Not detected<br>g) Not detected | a) Controls<br>b) 500 mg Mirex/kg<br>c) 50 mg Mirex/kg<br>d) 5 mg Mirex/kg<br>e) 5 mg Mirex/kg and 50 mg PCB/kg<br>f) 500 mg PCB/kg<br>g) 50 mg PCB/kg<br>levels in dry feed for 1 month<br>Carcass<br>Wt 50-110 g<br><br>Significantly lower serum thyroid hormone levels in fish fed 500 mg Mirex or 500 mg PCB/kg dry feed<br><br>BIOACCUMULATION; FISHES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BODY; CANADA | Leatherland, J.F.<br>Sonstegard, R.A.<br>1980<br>Journal of Fish Diseases 3:115-124 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-C16-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Buffalo, smallmouth
ICTICBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1813<br>Muscle | | GC-EC | 13 | Not given | 13 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-C16-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Carpsucker, river
CARPIODES CARPIO

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1814<br>Muscle | | GC-EC | 11 | Not given | 10 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-Cl6-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Mosquitofish
GAMBUSIA AFFINIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1815<br>Brain | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 86.64 +or- 4.65<br>ng/mg<br>b) 5.70 +or- 0.28<br>ng/mg<br>c) 119.37 +or- 3.88<br>ng/mg<br>d) 6.10 +or- 0.85<br>ng/mg<br>e) 37.88 +or- 2.61<br>ng/mg<br>f) 6.44 +or- 0.22<br>ng/mg<br>g) 192.24 +or- 19.21<br>ng/mg<br>h) 6.91 +or- 0.47<br>ng/mg<br>i) 301.83 +or- 30.63<br>ng/mg<br>j) 6.58 +or- 0.39<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>S/R=85.9 after 8 hr indicates tissue membrane barrier in resistant fishes<br>Additional data also for 0.6 ppb and 314 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |
| 1816<br>Eggs | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 89.08 +or- 5.58<br>ng/mg<br>b) 1.09 +or- 0.01<br>ng/mg<br>c) 75.13 +or- 0.69<br>ng/mg<br>d) 3.90 +or- 0.30<br>ng/mg<br>e) 52.63 +or- 2.24<br>ng/mg<br>f) 8.32 +or- 0.24<br>ng/mg<br>g) 80.81 +or- 27.02<br>ng/mg<br>h) 10.43 +or- 0.16<br>ng/mg<br>i) 53.24 +or- 5.32<br>ng/mg<br>j) 12.85 +or- 0.76<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppt and 314 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |

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1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-Cl6-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Mosquitofish
GAMBUSIA AFFINIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1817<br>Gall bladder | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 96.51 +or- 4.49<br>ng/mg<br>b) 2.42 +or- 0.04<br>ng/mg<br>c) 98.91 +or- 7.76<br>ng/mg<br>d) 8.32 +or- 0.95<br>ng/mg<br>e) 124.56 +or- 16.73<br>ng/mg<br>f) 14.94 +or- 0.81<br>ng/mg<br>g) 140.42 +or- 7.12<br>ng/mg<br>h) 20.80 +or- 0.66<br>ng/mg<br>i) 199.17 +or- 29.60<br>ng/mg<br>j) 20.64 +or- 0.97<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 3.4 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(5):737-740 |
| 1818<br>Gills | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 34.32 +or- 0.65<br>ng/mg<br>b) 3.42 +or- 0.29<br>ng/mg<br>c) 22.11 +or- 2.36<br>ng/mg<br>d) 3.73 +or- 0.20<br>ng/mg<br>e) 11.38 +or- 3.17<br>ng/mg<br>f) 4.14 +or- 0.39<br>ng/mg<br>g) 78.04 +or- 23.48<br>ng/mg<br>h) 6.50 +or- 0.78<br>ng/mg<br>i) 89.08 +or- 21.14<br>ng/mg<br>j) 6.59 +or- 1.38<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 3.4 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(5):737-740 |

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1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6.1pha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-Cl6-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Mosquitofish
GAMBUSIA AFFINIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1819<br>Intestine | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 8.64 +or- 0.65 ng/mg<br>b) 4.03 +or- 0.30 ng/mg<br>c) 31.56 +or- 3.39 ng/mg<br>d) 9.55 +or- 1.07 ng/mg<br>e) 15.82 +or- 0.43 ng/mg<br>f) 14.29 +or- 1.00 ng/mg<br>g) 30.09 +or- 7.29 ng/mg<br>h) 12.78 +or- 0.32 ng/mg<br>i) 56.67 +or- 9.38 ng/mg<br>j) 11.88 +or- 0.19 ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 314 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hensinger, R.N.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |
| 1820<br>Kidney | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 13.51 +or- 1.47 ng/mg<br>b) 10.22 +or- 0.87 ng/mg<br>c) 18.77 +or- 0.38 ng/mg<br>d) 20.39 +or- 0.86 ng/mg<br>e) 14.51 +or- 0.20 ng/mg<br>f) 50.96 +or- 0.48 ng/mg<br>g) 20.17 +or- 0.52 ng/mg<br>h) 66.80 +or- 1.78 ng/mg<br>i) 29.98 +or- 0.62 ng/mg<br>j) 52.63 +or- 0.60 ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 314 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Hensinger, R.N.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |

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1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,endo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxireme, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- (9 CI)
72-20-8
C12-H8-Cl6-O
MW 380.9, MP 200 C (decomp), also reported as 245 C (decomp)
Mosquitofish
GAMBUSIA AFFINIS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1021<br>Liver | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 32.80 +or- 4.18<br>ng/mg<br>b) 5.19 +or- 0.12<br>ng/mg<br>c) 38.59 +or- 3.50<br>ng/mg<br>d) 6.9[illegible] +or- 0.42<br>ng/mg<br>e) 26.80 +or- 3.07<br>ng/mg<br>f) 9.08 +or- 0.53<br>ng/mg<br>g) 119.88 +or- 23.63<br>ng/mg<br>h) 12.45 +or- 0.61<br>ng/mg<br>i) 117.09 +or- 25.01<br>ng/mg<br>j) 15.14 +or- 1.67<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 318 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Bunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |
| 1022<br>Spleen | | Radiometry | a) 3<br>b) 3<br>c) 3<br>d) 3<br>e) 3<br>f) 3<br>g) 3<br>h) 3<br>i) 3<br>j) 3 | a) Not given<br>b) Not given<br>c) Not given<br>d) Not given<br>e) Not given<br>f) Not given<br>g) Not given<br>h) Not given<br>i) Not given<br>j) Not given | a) 205.55 +or- 6.99<br>ng/mg<br>b) 4.45 +or- 0.42<br>ng/mg<br>c) 315.18 +or- 31.01<br>ng/mg<br>d) 14.96 +or- 1.58<br>ng/mg<br>e) 284.99 +or- 8.54<br>ng/mg<br>f) 16.24 +or- 0.89<br>ng/mg<br>g) 288.11 +or- 12.96<br>ng/mg<br>h) 24.08 +or- 0.81<br>ng/mg<br>i) 821.16 +or- 58.54<br>ng/mg<br>j) 39.13 +or- 1.16<br>ng/mg<br>Wet wt | a) 0.5 hr, insecticide-susceptible fishes (S)<br>b) 0.5 hr, insecticide-resistant fishes (R)<br>c) 2 hr (S)<br>d) 2 hr (R)<br>e) 4 hr (S)<br>f) 4 hr (R)<br>g) 6 hr (S)<br>h) 6 hr (R)<br>i) 8 hr (S)<br>j) 8 hr (R)<br>Exposure times to 10.2 ppb [C14]Endrin<br>Additional data also for 0.6 ppb and 318 ppb exposures<br>Susceptible fishes from ponds, Oktibbeha County, resistant fishes from drainage ditches, Humphreys County<br><br>Mississippi, Humphreys and Oktibbeha Counties<br><br>GILLS; EGGS; BIOACCUMULATION; FISHES; WATER POLLUTION; INSECTICIDES; MISSISSIPPI; CHLORINE ORGANIC COMPOUNDS; BRAIN; GALLBLADDER; INTESTINES; KIDNEYS; LIVER; SPLEEN; COMPARATIVE EVALUATIONS | Bunsinger, R.W.<br>Chambers, J.E.<br>Yarbrough, J.D.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(4):737-740 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Avocet
RECURVIPOSTRA AMERICANA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1423<br>Body | | GC-EC | 6 | 0.2-1.0 ppm wet wt | 0.47 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Bass, white
MORONE CHRYSOPS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1424<br>Muscle | | GC-EC | 14 | Not given | 144 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1425<br>Muscle | | GC-EC | 7 | Not given | 107 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Dolphin, white-beaked
LAGENORHYNCHUS ALBIROSTRIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1426<br>Adipose | | GC | 5 | 5.5-12.4 mg/kg lipid wt | 10.3 mg/kg lipid wt | Drowned in fishing net, ages 8-18 yr<br>Blubber, some muscle<br><br>North Sea, Scotland (E)<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Dunlin
CALIDRIS ALPINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1427<br>Body | | GC-EC | 13 | 0.1-0.4 ppm wet wt | 0.19 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD, MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1428<br>Body | | GC | 63 | Not given | 41 ppm lipid wt<br>Geometric mean | 3.8% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

(NEXT PAGE)

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1029<br>Brain | | GC | 63 | Not given | 0.54 ppm wet wt<br>Geometric mean | 6.8% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Geese, snow
CHEN C. CAERULESCENS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1030<br>Brain | Ingestion | | a) 5<br>b) 9<br>c) 5<br>d) 3<br>e) 6<br>f) 6 | a) 12.6-31.0 ppm<br>b) 2.1-15.0 ppm<br>c) 4.9-12.0 ppm<br>d) 5.3-14.0 ppm<br>e) <0.1-2.2 ppm<br>f) <0.1-0.12 ppm<br>Wet wt | a) 20.9 ppm<br>b) 10.3 ppm<br>c) 7.4 ppm<br>d) 9.6 ppm<br>e) 0.8 ppm<br>f) 0.1 ppm<br>Wet wt | a) 1972, dead<br>b) 1974, dead<br>c) 1972, moribund<br>d) 1972, moribund<br>e) 1972, shot near treated rice fields<br>f) 1972, shot near untreated rice fields<br>1 day-5 weeks after fields planted with aldrin-treated seed were flooded by heavy rains<br>Mostly immature white-phase birds<br><br>Texas, Colorado County, Garwood Prairie<br><br>Withdrawal, bobbing head and chattering bill movement, abnormal nibbling, dull sunken eyes, lack of muscular coordination, unsteady gait, violent body tremors, loud vocalization, paralysis<br><br>BIRDS; TEXAS; BRAIN; MUSCLES; AGRICULTURE; BIOACCUMULATION; PESTICIDE RESIDUES; DIELDRIN | Flickinger, E.L.<br>1979<br>Journal of Wildlife Management 43(1):94-101 |

(NEXT PAGE)

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonapth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Geese, snow
CHEN C. CAERULESCENS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1031<br>Muscle | Ingestion | | a) 3<br>b) 1<br>c) 1<br>d) 2 | a) 14.8-25.0 ppm<br>b) Not applicable<br>c) Not applicable<br>d) <0.1-0.1 ppm<br>Wet wt | a) 18.6 ppm<br>b) 3.0 ppm<br>c) 3.8 ppm<br>d) 0.1 ppm<br>Wet wt | a) Dead<br>b) Moribund<br>c) Shot near treated rice fields<br>d) Shot near untreated rice fields<br>1 day-5 weeks after fields planted with aldrin-treated seed were flooded by heavy rains<br>Collected 1972<br>Breast muscle<br>Mostly immature white-phase birds<br><br>Texas, Colorado County, Garwood Prairie<br><br>Withdrawal, bobbing head and chattering bill movement, abnormal nibbling, dull sunken eyes, lack of muscular coordination, unsteady gait, violent body tremors, loud vocalization, paralysis<br><br>BIRDS; TEXAS; BRAIN; MUSCLES; AGRICULTURE; BIOACCUMULATION; PESTICIDE RESIDUES; DIELDRIN | Flickinger, E.L.<br>1979<br>Journal of Wildlife Management 43(1):94-101 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonapth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Gull, laughing
LARUS ATRICILLA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1032<br>Eggs | | GC-EC | a) 15<br>b) 11 | a) Not detected-1.83 ug/g<br>b) Not detected-1.50 ug/g<br>Wet wt | a) 0.16 ug/g<br>b) 0.14 ug/g<br>Wet wt<br>Geometric means | a) 1971<br>b) 1975<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Ibis, glossy
PLEGADIS FALCINELLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1033<br>Eggs | | GC-EC | 19 | Not detected-2.16 ug/g wet wt | Not given | 1972<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DET; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Ibis, white
EUDOCIMUS ALBUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1034<br>Eggs | | GC-EC | a) 10<br>b) 10 | a) Not detected-0.10 ug/g<br>b) Not detected-0.11 ug/g<br>Wet wt | a) Not given<br>b) Not given | a) 1972<br>b) 1974<br>Shell thickness not significantly different (P<0.05) from pre-1947 norms<br><br>South Carolina, Cape Romain National Wildlife Refuge<br><br>EGGS; BIRDS; SOUTH CAROLINA; BODY; BRAIN; COMPARATIVE EVALUATIONS; DDE; DET; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES | Blus, L.J.<br>Lamont, T.G.<br>1979<br>Pesticides Monitoring Journal 13(2):56-60 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1435 Body | | GC-EC | 15 | 0.1-0.6 ppm wet wt | 0.28 ppm wet wt Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed Shorebirds, collected winter 1976/77 in industrially polluted bay Texas, Corpus Christi BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VARIATION | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Sandpiper, least
CALIDRIS PUSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1436 Body | | GC-EC | 30 | 0.1-0.6 ppm wet wt | 0.16 ppm wet wt Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed Shorebirds, collected winter 1976/77 in industrially polluted bay Texas, Corpus Christi BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VARIATION | White, D.H. King, K.A. Prouty, R.M. 1980 Pesticides Monitoring Journal 14(2):58-62 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Sandpiper, western
CALIDRIS MAURI

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1437<br>Body | | GC-EC | 22 | 0.1-0.2 ppm wet wt | 0.13 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Seal, harbor
PHOCA VITULINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1438<br>Adipose | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 0.71 mg/kg<br>b) 0.28 mg/kg<br>c) 0.10 mg/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br>Blubber, some muscle in IJmuiden seal<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, H.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 1439<br>Brain | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 0.09 mg/kg<br>b) 0.02 mg/kg<br>c) Not detected<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, H.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 1440<br>Liver | | GC | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 0.33 mg/kg<br>b) 0.06 mg/kg<br>c) 0.08 mg/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, H.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1041<br>Body | | GC-EC | 17 | 0.1-0.3 ppm wet wt | 0.16 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

1B,12B-Furo(3',2':8,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aB-cis)-
1165-39-5
C17-H12-O7
MW 328.3, MP 284-286 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1042<br>Liver | | HPLC | | Not given | 0.21 +or- 0.18 ng/g | Detection limit 0.05 ng/g<br>Random samples<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS;AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists 64(1):148-151 |

1B,12B-Furo(3',2':8,5)furo(2,3-h)pyrano(3,4-c)(1)benzopyran-1,12-dione, 3,4,7a,10a-tetrahydro-5-methoxy-, (7aB-cis)-
1165-39-5
C17-H12-O7
MW 328.3, MP 284-286 C
Swine
SUS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1043<br>Liver | | HPLC | | Not given | 0.10 +or- 0.03 ng/g | 1200 mg aflatoxin B1/g feed for 3 wk<br>Detection limit 0.05 ng/g<br><br>CATTLE; SWINE; FLORIDA; LIVER; MILK; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS;AFLATOXINS; BIOACCUMULATION | Gregory, J.F., III<br>Manley, D.<br>1981<br>Journal of the Association of Official Analytical Chemists 64(1):148-151 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Surf clam, thin-shelled
MACTRA VENEFORMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1450<br>Body | | GC-EC<br>GC | | a) Not given<br>b) Not given | a) 1.6 +or- 0.6 ppb<br>b) 1.6 +or- 0.2 ppb<br>Wet wt | a) Electron capture gas chromatography (GC-EC)<br>b) Selected ion monitoring mass spectrometry<br>Minimum detectable level 0.1-0.2 ppb (GC-EC)<br>Collected 1978<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 Cl)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 Cl)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Ark shell
SCAPHARCA SUBCRENATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1451<br>Body | | GC-EC | | Not given | 0.3 +or- 0.02 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 Cl)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 Cl)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Bass, sea
LATEOLABRAX JAPONICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1452<br>Body | | GC-EC | | Not given | 1.9 +or- 0.3 ppt wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
35765-80-5
C10-H5-Cl9
MW 448.23
Goby
ACANTHOGOBIUS FLAVIMANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1846<br>Body | | GC-EC<br>GC | | a) Not given<br>b) Not given | a) 7.1 +or- 0.5 ppb<br>b) 7.1 +or- 0.8 ppb<br>Wet wt | a) Electron capture gas chromatography (GC-EC)<br>b) Selected ion monitoring mass spectrometry<br>Minimum detectable level 0.1-0.2 ppb (GC-EC)<br>Collected 1978<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25: 305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
35765-80-5
C10-H5-Cl9
MW 448.23
Mullet, gray
MUGIL CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1887<br>Body | | GC-EC<br>GC | | a) Not given<br>b) Not given | a) 3.6 +or- 0.4 ppb<br>b) 3.3 +or- 0.6 ppb<br>Wet wt | a) Electron capture gas chromatography (GC-EC)<br>b) Selected ion monitoring mass spectrometry<br>Minimum detectable level 0.1-0.2 ppb (GC-EC)<br>Collected 1978<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25: 305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Mussel, blue
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1488<br>Body | | GC-EC<br>GC | | a) Not given<br>b) Not given | a) 6.3 +or- 0.6 ppb<br>b) 5.2 +or- 0.8 ppb<br>Wet wt | a) Electron capture gas chromatography (GC-EC)<br>b) Selected ion monitoring mass spectrometry<br>Minimum detectable level 0.1-0.2 ppb (GC-EC)<br>Collected 1978<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Morii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Oyster
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1489<br>Body | | GC-EC<br>GC | | a) Not given<br>b) Not given | a) 27 +or- 0.9 ppb<br>b) 31 +or- 1 ppb<br>Wet wt | a) Electron capture gas chromatography (GC-EC)<br>b) Selected ion monitoring mass spectrometry<br>Minimum detectable level 0.1-0.2 ppb (GC-EC)<br>Collected 1978<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Morii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-C19
MW 444.23
Ark shell
SCAPHARCA SUBCRENATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1444 Body | | GC-EC GC | | a) Not given b) Not given | a) 6.4 +or- 0.2 ppb b) 6.1 +or- 0.2 ppb Wet wt | a) Electron capture gas chromatography (GC-EC) b) Selected ion monitoring mass spectrometry Minimum detectable level 0.1-0.2 ppb (GC-EC) Collected 1978 Japan, Tokyo Bay CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T. Akiyama, K. Kaneko, S. Horii, S. Yamagishi, T. Kodera, K. 1980 Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-C19
MW 444.23
Bass, sea
LATEOLABRAX JAPONICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1445 Body | | GC-EC GC | | a) Not given b) Not given | a) 12 +or- 1 ppb b) 16 +or- 1 ppb Wet wt | a) Electron capture gas chromatography (GC-EC) b) Selected ion monitoring mass spectrometry Minimum detectable level 0.1-0.2 ppb (GC-EC) Collected 1978 Japan, Tokyo Bay CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T. Akiyama, K. Kaneko, S. Horii, S. Yamagishi, T. Kodera, K. 1980 Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1453<br>Body | | GC | 24 | Not given | 15 ppm lipid wt<br>Geometric mean | 2.2% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 1454<br>Brain | | GC | 24 | Not given | 0.15 ppm wet wt<br>Geometric mean | 7.2% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Goby
ACANTHOGOBIUS FLAVIMANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1455<br>Body | | GC-EC | | Not given | 0.5 +or- 0.02 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Mullet, gray
MUGIL CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1456<br>Body | | GC-EC | | Not given | 0.3 +or- 0.02 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Oyster
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1457<br>Body | | GC-EC | | Not given | 1.1 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Bass, white
MORONE CHRYSOPS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1458<br>Muscle | | GC-EC | 14 | Not given | 34 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.B.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Catfish, channel
ICTALURUS PUNCTATUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1459<br>Muscle | | GC-EC | 7 | Not given | 11 ng/g | Maximum value<br>Collected 10/79<br><br>Texas/Oklahoma, Lake Texoma<br><br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DED; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, B.G.<br>Carroll, J.E.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Dolphin, white-beaked
LAGENORHYNCHUS ALBIROSTRIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1460<br>Adipose | | GC/MS | 5 | 0.71-1.3 mg/kg lipid wt | 1.02 mg/kg lipid wt | Drowned in fishing net, ages 4-14 yr<br>Blubber, some muscle<br><br>North Sea, Scotland (E)<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1461<br>Body | | GC | 19 | Not given | 20 ppm lipid wt<br>Geometric mean | 2.6% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; HOMACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

(NEXT PAGE)

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1982<br>Brain | | GC | 31 | Not given | 0.23 ppm wet wt<br>Geometric mean | 6.9% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Sanderling
CALIDRIS ALBA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1983<br>Body | | GC-EC | 15 | 0.1-0.3 ppm wet wt | 0.19 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Sandpiper, least
CALIDRIS POSILLUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1984<br>Body | | GC-EC | 30 | 0.2-0.5 ppm wet wt | 0.32 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Seal, harbor
PHOCA VITULINA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1465<br>Adipose | | GC/MS | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 1.7 ug/kg<br>b) 0.68 ug/kg<br>c) 1.08 ug/kg<br>Lipid wt | a) IJmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br>Blubber, some muscle in IJmuiden seal<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 1466<br>Brain | | GC/MS | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 0.35 ug/kg<br>b) 0.08 ug/kg<br>c) 0.16 ug/kg<br>Lipid wt | a) Ijmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |
| 1467<br>Liver | | GC/MS | a) 1<br>b) 1<br>c) 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable | a) 0.88 ug/kg<br>b) 0.33 ug/kg<br>c) 1.4 ug/kg<br>Lipid wt | a) Ijmuiden, beached, age 3 months<br>b) Tholen, drowned, age 1 yr<br>c) Wadden Sea, beached, age 1 yr<br><br>North Sea, Netherlands<br><br>SEALS; DOLPHINS; NETHERLANDS; ADIPOSE TISSUE; BRAIN; LIVER; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; HEPTACHLOR EPOXIDE | Kerkhoff, M.<br>De Boer, J.<br>Geerdes, J.<br>1981<br>Science of the Total Environment 19:41-50 |



4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-Cl7-O
MW 389.32
Yellowlegs, lesser
TRINGA FLAVIPES

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1468<br>Body | | GC-EC | 17 | 0.1-0.2 ppm wet wt | 0.14 ppm wet wt<br>Geometric mean | Feet, beaks, wingtips, gastrointestinal tracts, skin, feathers removed<br>Shorebirds, collected winter 1976/77 in industrially polluted bay<br><br>Texas, Corpus Christi<br><br>BIRDS; CARCASS; TEXAS; KIDNEYS; LIVER; ARSENIC; CADMIUM; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; LEAD; MERCURY; POLYCHLORINATED BIPHENYLS; SELENIUM; VANADIUM | White, D.H.<br>King, K.A.<br>Prouty, R.M.<br>1980<br>Pesticides Monitoring Journal 14(2):58-62 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Ark shell
SCAPHARCA SUBCRENATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1969<br>Body | | GC-EC | | Not given | 1.3 +or- 0.06 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (9 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Bass, sea
LATEOLABRAX JAPONICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1970<br>Body | | GC-EC | | Not given | 2.1 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1971<br>Body | | GC | 22 | Not given | 30 ppm lipid wt<br>Geometric mean | 1.8% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

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4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1972<br>Brain | | GC | 22 | Not given | 0.29 ppm wet wt<br>Geometric mean | 6.6% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DIE; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Goby
ACANTHOGOBIUS FLAVIMANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1973<br>Body | | GC-EC | | Not given | 6.1 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Mullet, gray
MUGIL CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1974<br>Body | | GC-EC | | Not given | 1.2 +or- 0.05 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Mussel, blue
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1475<br>Body | | GC-EC | | Not given | 1.0 +or- 0.1 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Oyster
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1476<br>Body | | GC-EC | | Not given | 2.6 +or- 0.3 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-Cl9
MW 444.2
Surf clam, thin-shelled
MACTRA VENERIFORMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1477<br>Body | | GC-EC | | Not given | 0.5 +or- 0.08 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Ark shell
SCAPHARCA SUBCRENATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1478<br>Body | | GC-EC | | Not given | 6.6 +or- 0.3 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Bass, sea
LATEOLABRAX JAPONICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1479<br>Body | | GC-EC | | Not given | 11.3 +or- 0.6 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamaguchi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Cichlid
CICHLASOMA sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1480<br>Adipose | | Radiometry | 3 | Not given | 2.776 +or- 0.057 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 h<br>Visceral fat<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOID FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

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4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (3 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-C18
MW 409.76
Cichlid
CICHLASOMA sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1481<br>Air sac | | Radiometry | 3 | Not given | 0.094 +or- 0.005 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1482<br>Arachnoid fluid | | Radiometry | 3 | Not given | 0.927 +or- 0.491 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1483<br>Bile | | Radiometry | 3 | Not given | 1.251 +or- 0.092 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1484<br>Brain | | Radiometry | 3 | Not given | 0.078 +or- 0.004 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

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4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Cichlid
CICHLASOMA sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1485<br>Eye | | Radiometry | 3 | a) Not given<br>b) Not given | a) 0.342 +or- 0.122 ppm<br>b) 0.012 +or- 0.002 ppm<br>Wet wt | a) Eyeball<br>b) Lens<br>Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1486<br>Gall bladder | | Radiometry | 3 | Not given | 1.131 +or- 0.176 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1487<br>Gills | | Radiometry | 3 | Not given | 0.548 +or- 0.129 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1488<br>Heart | | Radiometry | 2 | Not given | 0.087 +or- 0.052 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

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4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-C18
MW 409.76
Cichlid
CICHLASOMA sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1489<br>Intestine | | Radiometry | 2 | a) Not given<br>b) Not given | a) 0.295 +or- 0.047 ppm<br>b) 0.135 +or- 0.016 ppm<br>Wet wt | a) Gut<br>b) Gut contents<br>Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1490<br>Kidney | | Radiometry | 3 | Not given | 0.222 +or- 0.013 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1491<br>Liver | | Radiometry | 3 | Not given | 0.422 +or- 0.030 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1492<br>Muscle | | Radiometry | 3 | Not given | 0.061 +or- 0.019 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

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4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-86-C18
RR 409.76
Cichlid
CICHLASOMA sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1493<br>Nerve | | Radiometry | 3 | Not given | 0.405 +or- 0.059 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1494<br>Ovary | | Radiometry | 3 | Not given | 0.289 +or- 0.026 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1495<br>Skin | | Radiometry | 3 | Not given | 0.115 +or- 0.012 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |
| 1496<br>Spinal cord | | Radiometry | 3 | Not given | 0.488 +or- 0.072 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

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4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-C18
MW 409.76
Cichlid
CICHLASOMA sp.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1497<br>Spleen | | Radiometry | 3 | Not given | 0.885 +or- 0.91 ppm wet wt | Exposed to 5 ppb cis-[C14]chlordane for 72 hr<br>Tropical freshwater fish, wt 300 g<br><br>South America<br><br>ARACHNOIC FLUID; AIR SAC; GILLS; NERVES; ILLINOIS; ADIPOSE TISSUE; BILE; BRAIN; EYE; GALLBLADDER; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; OVARIES; SKIN; SPINAL CORD; SPLEEN; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; FISHES; METABOLITES; PESTICIDE RESIDUES; WATER POLLUTION | Feroz, M.<br>Quddus Khan, M.A.<br>1979<br>Journal of Agriculture and Food Chemistry<br>27(6):1190-1197 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-C18
MW 409.76
Eagle, bald
HALIAEETUS LEUCOCEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1498<br>Body | | GC | 38 | Not given | 27 ppm lipid wt<br>Geometric mean | 2.6% lipid. Skin, beak, feet, gastrointestinal tract, liver removed<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |
| 1499<br>Brain | | GC | 38 | Not given | 0.27 ppm wet wt<br>Geometric mean | 6.9% lipid<br>Wild birds, dead or moribund, collected 1971-74<br><br>BIRDS; EAGLES; MARYLAND; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROPHENE; POLYCHLORINATED BIPHENYLS; NONACHLOR | Barbehenn, K.R.<br>Reichel, W.L.<br>1981<br>Journal of Toxicology and Environmental Health 8:325-330 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Goby
ACANTHOGOBIUS FLAVIMANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1500 Body | | GC-EC | | Not given | 2.7 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Mullet, gray
MUGIL CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1501 Body | | GC-EC | | Not given | 4.4 +or- 0.4 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Mussel, blue
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1502 Body | | GC-EC | | Not given | 5.3 +or- 0.5 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Oyster
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1503<br>Body | | GC-EC | | Not given | 15.8 +or- 1.6 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Morii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Surf clam, thin-shelled
MACTRA VENEBIFORMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1504<br>Body | | GC-EC | | Not given | 1.6 +or- 0.3 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Morii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-Cl8
MW 409.76
Ark shell
SCAPHARCA SUBCRENATA

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1505<br>Body | | GC-EC | | Not given | 4.0 +or- 0.1 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Morii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Bass, sea
LATEOLABRAX JAPONICUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1506<br>Body | | GC-EC | | Not given | 11.3 +or- 1.5 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Goby
ACANTHOGOBIUS FLAVIMANUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1507<br>Body | | GC-EC | | Not given | 1.5 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Mullet, gray
MUGIL CEPHALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1508<br>Body | | GC-EC | | Not given | 4.0 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb<br>Collected 1978.<br><br>Japan, Tokyo Bay<br><br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; NONACHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T.<br>Akiyama, K.<br>Kaneko, S.<br>Horii, S.<br>Yamagishi, T.<br>Kodera, K.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Mussel, blue
MYTILUS EDULIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1509 Body | | GC-EC | | Not given | 3.2 +or- 0.4 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br>Japan, Tokyo Bay<br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; MONOCHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T. Akiyama, K. Kaneko, S. Horii, S. Yamaguchi, T. Kodera, K. 1980 Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Oyster
CRASSOSTREA GIGAS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1510 Body | | GC-EC | | Not given | 13.7 +or- 0.9 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br>Japan, Tokyo Bay<br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; MONOCHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T. Akiyama, K. Kaneko, S. Horii, S. Yamaguchi, T. Kodera, K. 1980 Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindan, 1beta,2alpha,4alpha,5,6,7alpha,8,8-octachloro-3abeta,4,7,7abeta-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-74-2
C10-H6-C18
MW 409.76
Surf clam, thin-shelled
MACTRA VENERIFORMIS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1511 Body | | GC-EC | | Not given | 0.9 +or- 0.2 ppb wet wt | Minimum detectable level 0.1-0.2 ppb Collected 1978.<br>Japan, Tokyo Bay<br>CRUSTACEANS; JAPAN; BODY; MEASUREMENT METHODS; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES; MONOCHLOR; BIOACCUMULATION; FISHES; WATER POLLUTION | Miyazaki, T. Akiyama, K. Kaneko, S. Horii, S. Yamaguchi, T. Kodera, K. 1980 Bulletin of Environmental Contamination and Toxicology 25:305-312 |

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)
76-44-8
C10-H5-Cl7
MW 373.35, MP 95-96 C, VP 3X10(E-4) mm Hg at 25 C
Buffalo, smallmouth
ICTIOBUS BUBALUS

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1512 Muscle | | GC-EC | 13 | Not given | 5 ng/g | Maximum value<br>Collected 10/79<br>Texas/Oklahoma, Lake Texoma<br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)
76-44-8
C10-H5-Cl7
MW 373.35, MP 95-96 C, VP 3X10(E-4) mm Hg at 25 C
Shad, gizzard
DOROSOMA CEPEDIANUM

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1513 Muscle | | GC-EC | 14 | Not given | 37 ng/g | Maximum value<br>Collected 10/79<br>Texas/Oklahoma, Lake Texoma<br>OKLAHOMA; TEXAS; MUSCLES; BIOACCUMULATION; WATER POLLUTION; FISHES; DDD; DDE; DDT; DIELDRIN; CHLORINE ORGANIC COMPOUNDS; HEPTACHLOR EPOXIDE; POLYCHLORINATED BIPHENYLS | Hunter, R.G.<br>Carroll, J.H.<br>Randolph, J.C.<br>1980<br>Pesticides Monitoring Journal 14(3):102-107 |

4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)
77-73-6
C10-H12
MW 132.3, MP 32.9 C, BP 166.6 C, VP 10 mm Hg at 47.6 C
Cattle
BOS sp.

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1514 Milk | Ingestion | Radiometry | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable | a) 0.03%<br>b) 0.04%<br>c) 0.06%<br>d) 0.07%<br>e) 0.07%<br>f) 0.07%<br>Cumulative % of dose | a) 12 hr<br>b) 24 hr<br>c) 36 hr<br>d) 48 hr<br>e) 72 hr<br>f) 96 hr<br>Times after 10 mg [C14]DCPD/kg Lactating Jersey cow, wt 293 kg<br>CATTLE; HYDROCARBONS; TEXAS; ADULTS; FECES; MILK; URINE; BIOACCUMULATION | Ivie, G.W.<br>Oehler, D.D.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:662-670 |

(NEXT PAGE)

4,7-Methanoindene, 3a,4,7,7a-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro- (9 CI)
77-73-6
C10-H12
MW 132.3, MP 32.9 C, BP 166.6 C, VP 10 mm Hg at 47.6 C
Cattle
BCS ep.

(CONTINUED)

| TISSUE | EXPOSURE ROUTE | ANALYTICAL METHOD | NUMBER OF CASES | RANGE | MEAN | GENERAL INFORMATION | REFERENCE |
|---|---|---|---|---|---|---|---|
| 1515<br>Urine | Ingestion | Radiometry | 1 | a) Not applicable<br>b) Not applicable<br>c) Not applicable<br>d) Not applicable<br>e) Not applicable<br>f) Not applicable<br>g) Not applicable<br>h) Not applicable | a) 28.1%<br>b) 39.0%<br>c) 55.0%<br>d) 73.5%<br>e) 78.3%<br>f) 80.1%<br>g) 81.0%<br>h) 81.6%<br>Cumulative % of dose | a) 4 hr<br>b) 8 hr<br>c) 12 hr<br>d) 24 hr<br>e) 36 hr<br>f) 48 hr<br>g) 72 hr<br>h) 96 hr<br>Times after 10 mg [C14]DCPD/kg<br>Metabolites primarily glucuronide conjugates<br>Lactating Jersey cow, wt 293 kg<br><br>CATTLE; HYDROCARBONS; TEXAS; ADULTS; FECES; MILK; URINE; BIOACCUMULATION | Ivie, G.W.<br>Oehler, D.D.<br>1980<br>Bulletin of Environmental Contamination and Toxicology 24:662-670 |